

# LAND USE PLAN UPDATE

PREPARED FOR:

THE TOWN OF SURF CITY, N.C.

COASTAL ZONE

INFORMATION CENTER

BY:

**SATILLA PLANNING**

PLANNERS ☐ LANDSCAPE ARCHITECTS

P.O. BOX 1110 • ST. MARYS, GEORGIA 31558

ADOPTED: SEPTEMBER 1, 1987

CRC CERTIFICATION: SEPTEMBER 25, 1987

HD  
211  
.N8  
L36  
1987

North Carolina Coastal Zone Management Program

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U.S. DEPARTMENT OF COMMERCE NOAA  
COASTAL SERVICES CENTER  
2234 SOUTH HOBSON AVENUE  
CHARLESTON, SC 29405-2413

LAND USE PLAN UPDATE

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Prepared for  
THE TOWN OF SURF CITY, NORTH CAROLINA

by:

**SATILLA PLANNING**

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P.O. BOX 1110 • ST. MARYS, GEORGIA 31558

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## INTRODUCTION

The Coastal Area Management Act of 1974 establishes a cooperative program of land planning and management between local governments and the State. Land Use planning is intended to be the focus of local government's involvement; it gives local leaders an opportunity to establish and implement policies designed to guide the development of their community.

The Surf City Land Use Plan is an expression of both short and long range planning goals in which the local government has set forth its major policies concerning how and where future development should occur over the next ten years.

The Land Use Plan is an important policy document at local, regional, state and federal levels. The users, in addition to the Town of Surf City, are regional councils of government, state and federal permitting agencies, and public or private funding and development groups.

### Local Government Uses

The plan provides policy guidance for decisions related to overall community development, while serving as the basis for land development regulations and capital facilities programming. Planning for the provision and extension of capital intensive services, such as central sewer and water, is aided by the land use plan's identification of likely growth trends and by plan policies which direct growth.

### Local Land Development Uses

Developers and investors (including prospective residents) can use the land use plan as a primary source of information about the community. The plan provides data and analysis on present development patterns, capacity of community facilities, growth patterns, and physical limitations to development. The plan also provides developers with information about the community's preferences for development types, densities and locations.

### Regional Uses

The Surf City Land Use Plan will be used by the Cape Fear Council of Governments for regional planning purposes and in their function as Regional Clearinghouse (A-95) for State and Federal funding programs.

### State and Federal Uses

Coastal government's land use plans are used in evaluating development proposals requiring approval by various State and Federal agencies. These agencies must ensure that permitting decisions consider and are consistent with the policies and land classification system established by the Land Use Plan. This requirement for consistency is established by the North Carolina Coastal Area Management Act. Similarly, the use of State and Federal funds, either as grants or as direct agency expenditures, must be consistent with the local plan.

## EXISTING CONDITIONS

### Existing Land Use

Existing land use in Surf City is displayed by Map One. It shows how each parcel of land in the Town is currently used based on field inventories conducted during October, 1985 and aerial photography flown in September, 1984. Existing land use was compiled by way of eight categories:

- o Single Family Residential
- o Duplex
- o Mobile Home
- o Multi-Family
- o Commercial
- o Public/Institutional
- o Transportation and Utilities
- o Vacant

Single Family Residential includes all detached Single Family Homes on individual lots.

Duplexes are structures with two attached units.

Multi-Family residential structures are those with three or more dwelling units.

The Mobile Home category includes both single mobile homes on individual lots and mobile homes in parks. Recreational vehicle/travel trailer parks are also included here.

The Commercial use category consists of retail sales and service establishments including tourist oriented, recreational businesses. Motels are also included as commercial uses.

Public/Institutional uses include government offices with related areas, and churches.

Transportation and Utilities includes Road rights-of-way, electric, telephone, and gas facilities.

Vacant land areas are those which currently are not in use but which are generally developable under current local, state and federal regulations.

Table One (following page) provides a quantitative breakdown of land uses within the Town. Both results of the 1985 survey and information from the 1981 Land Use Plan Update are provided.



TABLE ONE

Existing Land Use  
Surf City, North Carolina

| <u>Land Use Category</u>              | <u>1981<br/>Acreage</u> | <u>1985<br/>Acreage</u> | <u>Percent<br/>Change</u> |
|---------------------------------------|-------------------------|-------------------------|---------------------------|
| Spoil Islands                         | 146.0                   | 146.0                   | 0                         |
| Water and Wetlands                    | 2,152.0                 | 2,152.0                 | 0                         |
| Beach                                 | 34.0                    | 34.0                    | 0                         |
| Single Family<br>Residential-Detached | 54.0                    | 111.0                   | +153% (3)                 |
| Duplex                                | (1)                     | 5.1                     | (3)                       |
| Multi-Family                          | (1)                     | 20.4                    | (3)                       |
| Mobile Home                           | 38.0                    | 67.1                    | + 77%                     |
| Commercial                            | 30.0                    | 29.2                    | + 62% (4)                 |
| Public/Institutional                  | (2)                     | 19.4                    | (4)                       |
| Transportation & Utilities            | --                      | 101.9                   | --                        |
| Vacant-Developable                    | <u>470.0</u>            | <u>339.6</u>            | - <u>28%</u>              |
|                                       | 2,924.0                 | 3,025.7                 | + 3.5% (5)                |

Notes:

(1) Included with Single Family detached; 1981 plan did not break out individual residential categories.

(2) 1981 plan included Institutional with Commercial.

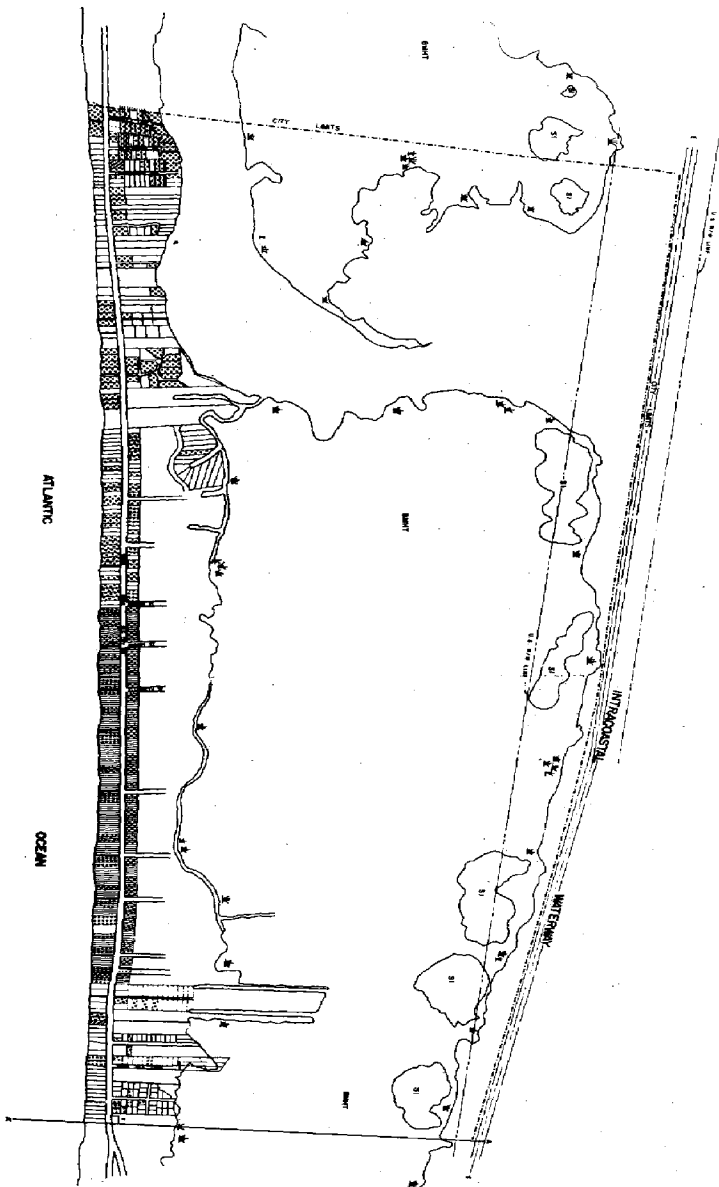
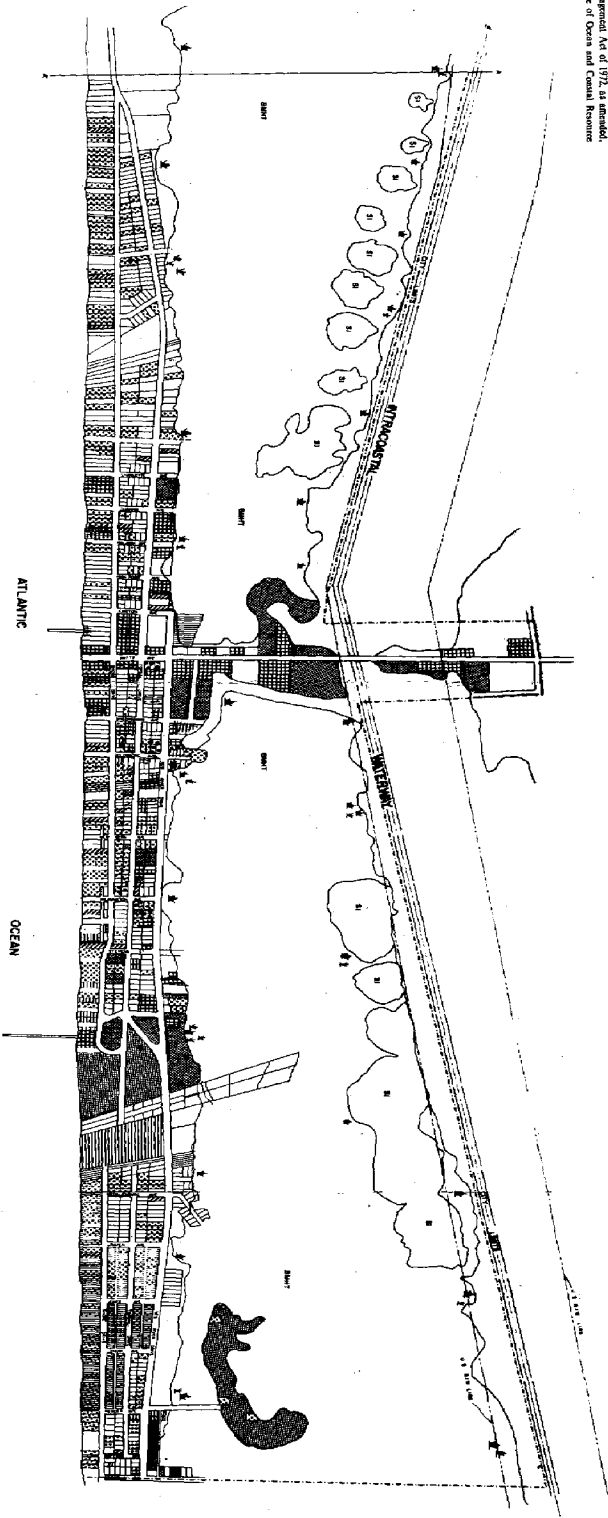
(3) Increase of Single Family, duplex and Multi-Family combined.

(4) Increase combined with Public/Institutional.

(5) Increased assumed due to updated maps; see page 6.

Source: Satilla Planning, Inc. from October, 1985 Field Survey and 1981 Surf City Land Use Plan Update.

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the National Oceanic and Atmospheric Administration, which is administered by the Office of Ocean and Coastal Resource Management, NOAA.



# **SURF CITY, N.C.**

MAP 1

Prepared by: SATELLITE PLANNING  
St. Mary's, Georgia

Mapping Date: JAN. 1988

Scale: 1" = 100' 100'

The Existing Land Use Table accounts for both developed and undeveloped land. According to the 1981 Land Use Plan update, there were 470 acres of vacant, developable land. That is, vacant land areas that are generally available for development under current local, state and federal regulations. According to the October, 1985 field survey, 130 of these acres were converted to developed land uses. In addition to these vacant areas, the 1981 plan identified 2,332 acres of dredge spoil islands, water, wetlands, and beach. These areas did not change during the past five years.

Table One indicates significant increases in all developed land use categories. The 1981 plan did not break residential uses into individual categories, however, as a group residential uses (not including mobile homes) increased by more than 82 acres or 153%. The 181 unit Surf Condominium project and the construction of new single family residences and duplexes on previously platted lots accounted for most of this increase.

More than 67 acres of land are devoted to mobile homes and travel trailers. This is an increase of 77% over the 1981 plan; however, it does not appear that this many new units were actually added during the past four years. This difference may be attributable to different calculation methods or how travel trailer areas were categorized. Commercial land uses increased but the exact amount is not known because the 1981 plan combined commercial with public/institutional uses. Together, these categories increased by 62%.

Additionally, road rights-of-way (transportation) and utilities were not identified by the 1981 plan so comparisons cannot be made. It is important to note that when the 1985 field survey and subsequent land area calculations were totaled with the 1981 plan's 2,332 acres of water, beach, spoil islands and wetlands (which are assumed to have remained constant), a total of 3,026 acres were identified within Surf City's Town Limits. This represents 102 acres more than the 1981 plan. Where the discrepancies are between the two plans is not known; it is assumed that the difference is due to updated mapping prepared as part of this Plan.

Another way to view and analyze Surf City's existing land use pattern is to examine the net, developed area only, excluding water, marsh, vacant lands and street rights-of-way. This analysis is presented by Table Two (page 7).

The developed land table demonstrates the residential character of Surf City accounting for 83% of all developed land area. While mobile homes and travel trailers comprise 27% of Surf City's developed area, single family homes on individual lots constitute the largest single land use category: 45%. An examination of the existing land use map shows that certain key features of Surf City's land use pattern stand out as follows:

TABLE TWO

Developed Land  
Surf City, North Carolina

|                                      | 1981         |                   | 1985         |                   |
|--------------------------------------|--------------|-------------------|--------------|-------------------|
|                                      | <u>Acres</u> | <u>% of Total</u> | <u>Acres</u> | <u>% of Total</u> |
| Single Family Residential - Detached | 54           | 44%               | 111.0        | 45%               |
| Duplex                               | (1)          | --                | 5.1          | 2%                |
| Multi-Family                         | (1)          | --                | 20.4         | 9%                |
| Mobile Home/Travel Trl.              | 38           | 31%               | 67.1         | 27%               |
| Commercial                           | 30           | 25%               | 29.2         | 12%               |
| Public/Institutional                 | (2)          | (2)               | 19.4         | 8%                |
| Utilities                            | <u>--</u>    | <u>--</u>         | <u>.2</u>    | <u>1%</u>         |
|                                      | 122 acres    | 100%              | 252.4 acres  | 100%              |

Notes:

(1) Included with Single Family in 1981 plan.

(2) Included with Commercial in 1981 plan.

Source: Satilla Planning, Inc. from October, 1985 Field Survey and 1981 Land Use Plan Update.

Residential Land Use. Most of the developed oceanfront lots are single family particularly southeast (toward Topsail Beach) from Batts Avenue. There are numerous vacant building lots including many on the ocean in this same area southeast of Batts Avenue. Mobile homes and travel trailers constitute a significant portion of the Town's housing stock - virtually all these units are located either side of Batts Avenue at the Bridge entry to Town and northwest of Batts Avenue toward west Onslow Beach. Multifamily development is limited due to the lack of central sewage disposal facilities. The Surf Condominiums is the only large scale multi-family development and has its own package sewage treatment system.

Commercial Land Use. Most commercial uses and services are located near the bridge entry to Town along Batts Avenue and along New River Drive, Topsail Drive and Shore Drive. A recent trend has been the establishment of commercial uses along New River Drive northwest of Batts Avenue.

Public/Institutional uses consist primarily of Town facilities and churches. All of these uses are located northwest of Batts Avenue along New River Drive, Topsail Drive and Shore Drive. Additionally, the medical center at New River Drive and Goldsboro Avenue is included in this category.

Transportation and Utilities. Road rights-of-way, both Town and State, comprise virtually all of this category. Additionally, telephone and L.P. gas facilities are located northwest of Batts Avenue between New River Drive and Topsail Drive.

Summary. Surf City can be characterized as a family vacation area consisting primarily of single family homes, duplexes, and mobile homes with one significant condominium project. Small motels and efficiency apartments also provide vacation housing. Commercial facilities and services are located primarily in the central part of Town. Significant undeveloped areas, including ocean and sound land, are located west of Batts Avenue toward Topsail Beach.

The future availability of sewer will have an obvious direct report on how these vacant areas are developed.

#### Roadways and Transportation

Street networks in and around a community are important aspects of future development. Road access can be a key determinant of the attractiveness of land for various types of land development. There are also critical reciprocal relationships between roads and land use. On one hand, the availability of good road capacity and traffic volume makes the adjoining land attractive for commercial uses that depend on high visibility and accessibility for economic success. On the other hand, the overloading of these roads with ill-designed land uses, such as strip commercial development with no control of curb cuts, can lead to problems of traffic safety, road capacity and poor visual appearance that can ultimately detract from the viability of the

land uses and the road itself.

As a long and narrow island with two access points, Topsail Island Transportation System had four development alternatives. NC Route 210 and 50 connect Surf City to the mainland via the swing bridge across the Intracoastal Waterway. Route 210 breaks from 50 after crossing the bridge and serves as the only Route connecting west Onslow Beach (northeast of Surf City - New River Drive). Route 50 (Topsail Drive) serves the opposite end of the Island providing access to Topsail Beach.

A customary land use plan would identify the community's road system in components such as Principal Arterials, Minor Arterials, Major Collectors, etc. With one street access point by way of a bridge over the Intracoastal Waterway (SR 210 and 50) and one major north east-southwest road serving the island (SR 210 northeast and SR 50 southwest), this type of classification and analysis is unnecessary. it should be sufficient to say that Topsail Drive (SR 50) and New River Drive (SR 210) serve as Collector Streets feeding into Batts Avenue which serves as a Minor Arterial in turn connecting with U.S. Route 17 - a Principal Arterial.

#### Parking Conditions and Traffic

Parking issues in most beach communities inevitably relate to beach access. Most residential and commercial areas have adequate parking to serve their direct uses or customers. However, the demand and capacity of the Town's beaches make the provision of adequate parking a difficult task. Parking for beach access is addressed by the Town's Beach Access Plan. The Beach Access Plan was reviewed by Town officials and appropriate portions were incorporated in to the policy section of this plan. See page 12 Beach Access, for an inventory of parking at public beach access areas.

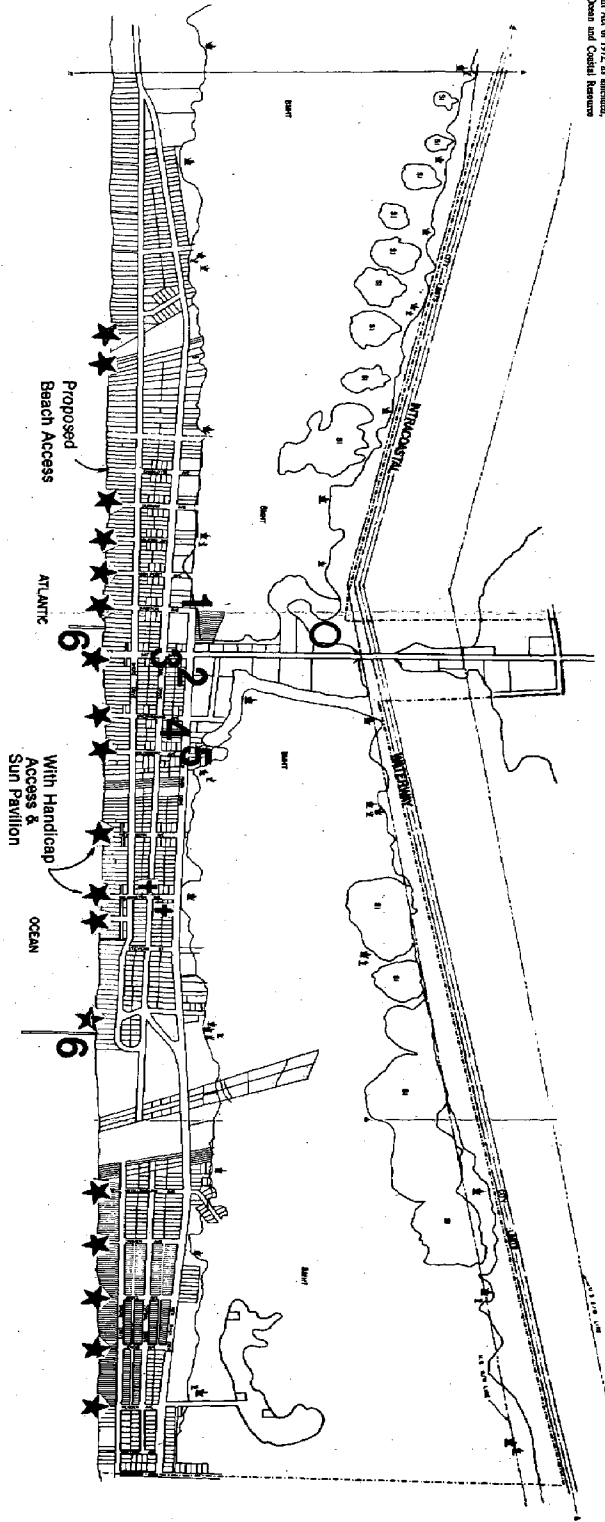
The Town's roads adequately serve current traffic levels. The drawbridge across the Intracoastal Waterway adequately accommodates traffic at this time. The Town is not aware of any State plans to replace this bridge.

#### Community Facilities

Community facilities are an important land use planning factor not only because they can constitute significant land uses in themselves, but also because the type, location and capacity of these facilities bear an important reciprocal relationship to the areas they serve and therefore to most other land use categories.

The location of Surf City's existing Community Facilities are identified by the accompanying map. As a small, family oriented community with only 500 year-round residents, the Town does not have extensive public facilities. The existing facilities identified are:

The preparation of this map and forecast is part through a grant provided by the North Carolina Coastal Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, NOAA.



# COMMUNITY FACILITIES

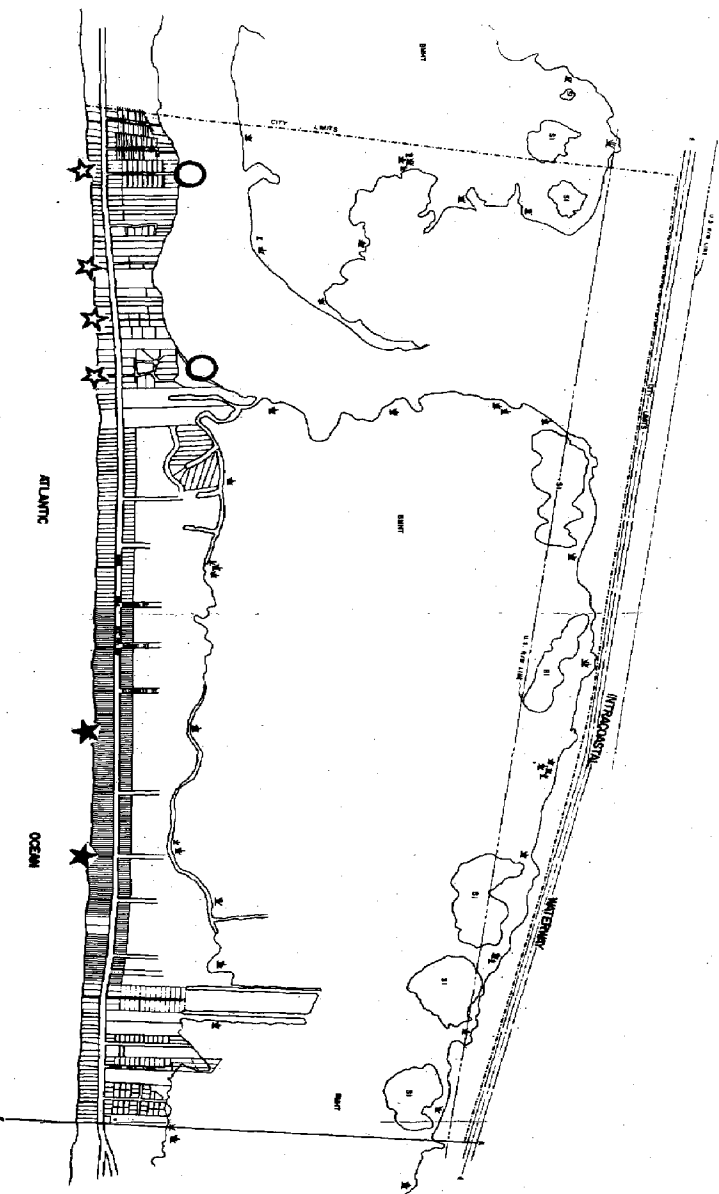
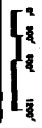
- 1-ELEVATED WATER TOWER
- 2-WATER STORAGE
- 3-VOLUNTEER FIRE DEPARTMENT
- 4-TOWN HALL & POLICE DEPARTMENT
- 5-RESCUE SQUAD
- 6-PRIVATE FISHING PIER
- + CHURCH
- ★ PUBLIC BEACH ACCESS
- PRIVATE BEACH ACCESS
- PRIVATE BOAT RAMP

## SURF CITY, N.C.

MAP 2

Prepared By: SATELLA FLUORIMETER  
Dr. Robert A. Gentry

Issued Date: JAN. 1980



- o The water distribution system
  - water tanks
  - wells #1 and #2
- o The Town Hall and Police Department
- o The Rescue Squad
- o Volunteer Fire Department
- o Fishing Piers
- o Churches
- o Public beach access points

Public Schools. There are no schools in the Town. Residents attend schools in the Pender County system about 15 miles from the Town.

Water Distribution System. The Town's water system is supplied by two wells located approximately one mile north of the Introacastal Waterway Bridge along NC 50 and 210. Water is chlorinated at each 8" well. Well No. One has a pumping capacity of 350 gallons per minute (gpm) and well No. Two is rated at 400 gpm. The system's capacity is rated at 1.1 million gallons per day. Storage consists of one 100,000 gallon ground tank and one 100,000 gallon elevated tank. There are currently 600 residential and 100 commercial meters. About 1,300 residential units are currently served by the Town's water system.

The Town is considering improvements to the system consisting of:

- o 500,000 gallon concrete storage tank
- o a new deep well and pump (#3)
- o waterlines to connect into system

The engineer's estimated cost to complete these improvements is slightly more than \$600,000 (May, 1985).

Additionally, the Town plans to interconnect its water system with Onslow County during 1986 for an estimated cost of \$15,000. The proposed connection to the Onslow County water system will provide additional water capacity to Surf City. Emergency water supply can be obtained from Onslow County as well as Topsail Beach.

Sewage Treatment. Sewage disposal is now handled almost exclusively by individual ground infiltration systems (septic tanks and drain fields). The Town's only condominium (181 units) maintains its own package treatment system.

The Topsail Beach-Surf City 201 Facilities Plan, prepared in July, 1977 and revised in January, 1980, recommended that sewage treatment for Surf City, Topsail Beach and West Onslow Beach be handled through a combination gravity/forcemain collection system with a central 1.15 million GPD mainland treatment facility. The cost of this system was



estimated at approximately \$15 million in 1979 dollars.

More recently, Surf City has proposed construction of a 345,000 GPD land application mainland wastewater treatment facility. The total estimated construction cost including all collection lines, pump stations and treatment facility is \$4.3 million (May, 1985). General obligation bonds, approved by Surf City's voters in January, 1986, will serve as the primary means of financing the project.

Construction on the municipal sewer system is due to begin in late 1987. Construction is expected to take about 18 months. Therefore, the expected operational date of the municipal sewer system for all of Surf City is the fall of 1988. Town policy has not yet been established for hook-ups. The Council is currently in the final stages of adopting policy to govern the operation of the sewage system. Construction of the sewage system is in keeping with a 1986 amendment to the Town's policies regarding the provision of public sewage collection and treatment in the Surf City Planning Area (see page 31).

Beach Access. The Community Facilities Map identifies 4 private and 20 public beach access points. These access points are located primarily at the end of Town rights-of-way. This map also indicates whether parking is available at specific access locations and indicates the location of the Town's large central facility with handicap access.

There are a total of 35 parking spaces at the 20 access points as follows: Handicap access at the ends of New Bern and Wilmington Avenues - nine and seven parking spaces respectively; Greensboro Avenue seven; Raleigh Avenue five; Mecklenberg Avenue two; Jones Avenue two, Craven Avenue three. Another public access is proposed for Charlotte Avenue with parking available for twelve (12) vehicles. The remaining beach accesses have not parking spaces available.

Solid Waste. The Town contracts for solid waste collection. Disposal is currently handled at the Pender County landfill off NC 50 on the mainland. The State extended its order to close this facility by one year until the fall of 1986. The County is considering the installation of an incinerator to handle solid waste from Surf City, Topsail Beach and Hampstead Acres if an incinerator or other method of disposal is not in place by the fall of 1986, Surf City may be forced to truck its solid waste to the only other County landfill site near Burgaw.

Police, Fire and Town Administration. The Town provides full time police protection. Its Police Department consists of a full time Chief and three full time police officers. Dispatching is handled through the Central Dispatch Center of the Pender County Sheriff's Department. Operations are assisted by two auxiliary officers with backup provided by the County Sheriff's Department.

Fire protection is provided by a volunteer department consisting of a Chief and 30 firefighters. There are 130 hydrants strategically located within 1000 feet of one another throughout the Town. The Town's fire rating is 8AAA which indicates about the best fire rating

available for a volunteer force.

The Town's administrative affairs are handled by a Town Manager and two full-time office personnel.

Police, fire and administrative staffing is considered to be adequate at this time.

#### Land Use Regulations.

Zoning. The Surf City Ordinance regulates the use of land within the Town's corporate limits. The Town adopted its current ordinance on March 2, 1965 and adopted major revisions to the ordinance in April, 1985. The Town does not exercise extraterritorial jurisdiction. The land use districts provided for in the ordinance are as follows:

- o R-5 Residential - one, two and multi-family dwellings up to 16 units/acre.
- o R-5 - Residential Mobile Home - mobile home and travel trailer parks.
- o R-10 Residential - one, two and multi-family dwellings including townhouses up to 12 units/acre.
- o R-20 Residential - single family dwellings at 2 units/acre.
- o Planned Unit Development - condominiums, attached single family, detached single family, two family and townhouses up to overall maximum density of 16 units/acre.
- o C-1 Central Business District
- o C-2 General Commercial District
- o Conservation District

Subdivision Regulations. Adopted April 15, 1977, the Town's subdivision regulations establish design standards that apply when land is subdivided or re-subdivided for immediate or future sale. Specific objectives and areas regulated include:

- o No Town services provided until final plat is approved.
- o No dedication of streets or other improvements accepted until final plat is approved.
- o No construction permits issued until final plat is approved.
- o New street alignments must comply with any adopted thoroughfare plan.
- o Subdivisions must comply with the Town's zoning ordinance

or any other officially adopted plan.

- o Subdivision platting requirements established including design standards for lots, streets, etc.
- o Construction standards for street grading and paving, drainage, water, sewer (as available), street lights, sidewalks, and underground utilities established.

Flood Damage Prevention Ordinance. Adopted April 5, 1977 to comply with the National Flood Insurance Program, this ordinance requires the following:

- o All new residential construction or improvements greater than 50% of structure's market value must be elevated to or above 100-year base flood elevations.
- o Commercial buildings must be elevated above base flood elevations or flood proofed.
- o Anchorings and piling designs must be certified by a registered engineer or architect, or must be in full compliance with the N.C. State Building Code.
- o No alterations of frontal dunes with fill for structural support is allowed in "V" or velocity zones except as may specifically be allowed under C.A.M.A. regulations.

## GROWTH TRENDS AND PROJECTIONS

Surf City has developed as a vacation/second home community with permanent residents representing less than 10% of its seasonal population. However, the 1981 Land Use Plan projected that this percentage will increase during the 10-year planning period.

Table Three presents permanent, average seasonal and peak seasonal population projections from the 1981 Land Use Plan.

TABLE THREE

### Surf City Population Projections From 1980 Land Use Plan

| <u>Year</u> | <u>Peak Seasonal</u> | <u>Average Seasonal</u> | <u>Permanent</u> |
|-------------|----------------------|-------------------------|------------------|
| 1980        | 6,010                | 4,310                   | 390              |
| 1990        | 7,340                | 5,250                   | 890              |
| 2000        | 8,670                | 6,180                   | 1,390            |

Source: 1981 Land Use Plan.

Residential unit counts from the land use and housing inventory conducted during the fall of 1985 are presented by Table Four.

TABLE FOUR

### Surf City Dwelling Units

|                            | <u>1985</u> |
|----------------------------|-------------|
| Single Family              | 619         |
| Duplex                     | 70          |
| Multi-Family               | 286         |
| Mobile Home/Travel Trailer | 454         |
| Motel                      | <u>142</u>  |
| Total:                     | 1,571       |

Source: Satilla Planning, Inc. from October, 1985 Field Inventory.

According to the 1980 U.S. Census, there were 1,037 housing units in Surf City. Not including motel rooms, this has increased by 392 units or 38% in the past five years. There were 503 permanent residents in 1986 (Source: Town of Surf City) representing 2% of Pender County's total population.

Not including motel rooms, there were 1,429 dwelling units located on 200 acres indicating an overall development density of 7.15 units per acre. Construction and operation of the proposed central sewage system will most likely result in higher overall densities. Current zoning regulations allow densities in the range of 12 to 16 units per acre.

Estimates as to seasonal population can be made once an average number of persons per dwelling unit is established. The 1981 plan indicates the ratio of peak seasonal visitors per dwelling unit is about 6. Motel room occupancy was estimated at 3.6 persons during peak periods. Based on these assumptions combined with a 90% occupancy rate during peak period the following projections were made (Table Five).

TABLE FIVE

Surf City Peak Seasonal Population Projections

| <u>Year</u> | <u>Dwelling Units</u> | <u>Peak Seasonal Population</u> |
|-------------|-----------------------|---------------------------------|
| 1986        | 1,571                 | 8,176                           |
| 1990        | 1,851                 | 9,689                           |
| 1995        | 2,201                 | 11,579                          |
| 2000        | 2,551                 | 13,469                          |

Source: Satilla Planning, Inc., 1986.

## CONSTRAINTS TO DEVELOPMENT

This section will serve to update the 1981 Land Use Plan which identified the following as physical limitations to development:

- o Hazard Areas
- o Soils
- o Water Supply
- o Fragile Areas
- o Community Facilities

### Hazard Areas

Areas of Environmental Concern (AEC's) located in Surf City include: ocean erodible AEC's; flood hazard AEC's; and estuarine shoreline AEC's. Other hazard areas include the 100 year flood zone. Additional AEC's (Fragile Areas) are described on page 21. Surf City manages development in AEC's in accordance with State and Federal guidelines. More detailed information on these guidelines is available from the Corps of Engineers and North Carolina Division of Coastal Management.

Ocean Erodible AEC's. These are areas where a substantial possibility of excessive erosion and significant shoreline fluctuation exists. The ocean erodible AEC is based on a setback from the first line of stable natural vegetation plus an additional area where erosion can be expected from storm surges and wave action.

When the 1981 plan was prepared, the State rule was to multiply the annual erosion rate factor by 30 to determine the boundary of the ocean erodible AEC. This rule has now been modified to use 60 rather than 30 as the multiplier. The practical effects of this change in Surf City was to increase the ocean erodible AEC from 210 feet to 270 on the northernmost 480 feet of the Town and from 215 feet to 275 feet along the remaining 4.8 miles of Town ocean frontage.

Estuarine Shoreline AEC's. Estuarine shorelines are defined as non-ocean shorelines which are especially vulnerable to erosion, flooding or other adverse effects of wind and water and are intimately connected to the estuary. In Surf City, the estuarine shoreline encompasses the area landward from Banks Channel for a distance of 75 feet from the mean high water level for about 5.7 miles. Development is not prohibited in any of these AEC's. However, it must conform with uses and construction standards delineated in the State Guidelines for Areas of Environmental Concern.

Flood Hazard AEC's. The flood hazard AEC corresponds to the National Flood Insurance Program V-zones which refer to flood prone areas that are also susceptible to high velocity wave surges.

Surf City was converted to the Regular Phase of the National Flood Insurance Program (NFIP) in 1977 with the issuance of Flood Insurance Rate Maps (FIRMS). In the fall of 1983, preliminary Flood Insurance

Studies for the Town were released by FEMA. These maps were subsequently finalized and adopted by Surf City. The new maps are dated February 15, 1985.

Map Three delineates the flood zones identified by the February 15, 1985 F.I.R.M. A comparison of the 1977 and 1985 maps reveals considerable changes in the designation of flood hazard areas. The "V" zones, or areas subject to high velocity water from wave momentum during the 100-year flood, cover considerably less land on the new maps. According to the new FIRM maps, the V zones in Surf City generally run parallel to the beach and vary from 100 to 200 feet inwidth. About 15% of the land area of the Town is now located in the "V" zone. In comparison, the old rate maps indicated that about 50% of the Town was located in "V" zones. Areas on the sound side of the Island are no longer included as they previously were.

Other Flood Prone Areas. The 1977 F.I.R.M. indicated that about 90% of the Town of Surf City was estimated to be in the "A" zone below the 100-year flood elevations, with about 30% of this area also being in the "V" zone. The 1985 FEMA flood insurance rate maps indicate that about 70% of the Town remains below the 100-year flood elevations. A relatively extensive area in the central portion of the island is now designated as "B" zone which is susceptible to flooding only from storms between the 100 year and 500 year storms. The "B" zone varies in width from less than 100 feet to about 600 feet in some central portions of the Town where the zone is from 40% to 60% of the island's width. About 30% of the Town lies in the "B" zone. The 1983 study estimates that the 100-year storm will cause beach erosion of 169 feet at the southwest end of Town and 189 feet at Batts Avenue.

### Soils

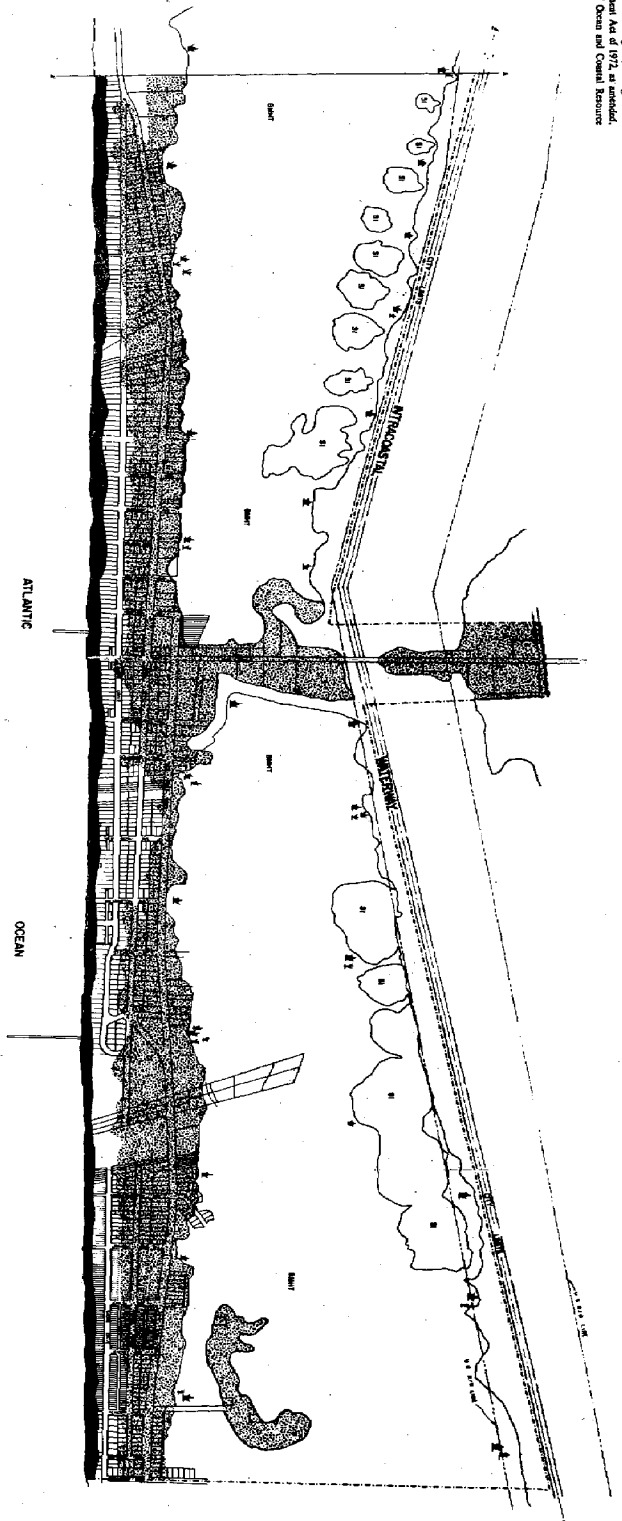
According to the Soil Survey of the Outer Banks of North Carolina, eight dominant soils are found within Surf City's jurisdiction. The following describes these eight categories:

Beach-Foredune Association - This soil is found mainly on the ocean side of the island and is the long, narrow area comprising the frontal dune and beach. The beaches are flooded daily, and sand sizes range from fine to very coarse, but chiefly fine. Because of the tidal flooding, activities other than beach-related recreation are severely limited.

Carteret Soils - Low - This is a poorly drained, sandy marsh soil found on the soundside of barrier islands. It is flooded daily and has severe limitations for all types of active, primary uses.

Corolla - Fine Sand - These are the soils found on the broad, level-to-slightly-sloping flats behind the foredunes. They have a thin organic layer and are moderately drained throughout, although during the wetter seasons the water table may be within 1.5 feet of the surface, thus posing problems for on-site sewage disposal.

The information shown on this map was prepared by the North Carolina Coastal Management Program, which is authorized by the Coastal Zone Management Act of 1972, as amended, and is administered by the Office of Ocean and Coastal Resource Management, NOAA.



# FLOOD HAZARD AREAS

**FLOOD HAZARD AREA-100 YEAR FLOOD PLAIN ("A" ZONES)**

**FLOOD HAZARD AREA ("V" ZONES)**

Source: Flood Insurance Rate Map  
Dated: February 15, 1985

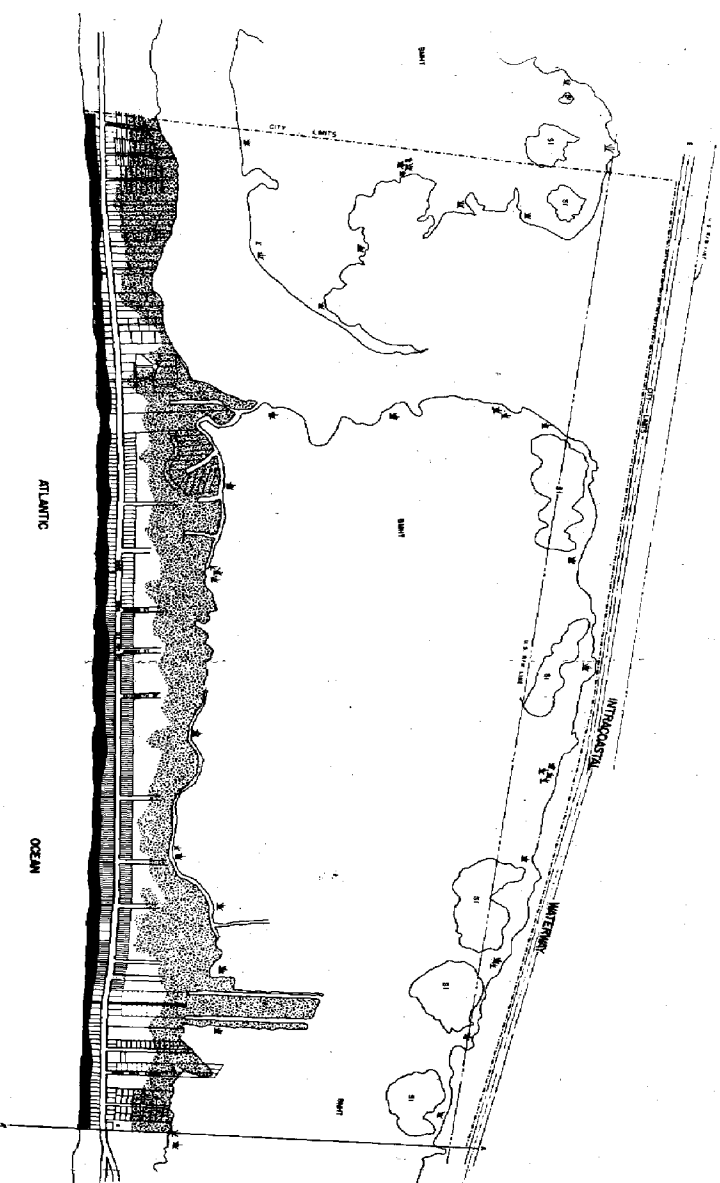
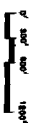
## SURF CITY, N.C.

MAP 3

PREPARED BY: NATELLA PLANNING  
21. North Carolina



Map Date: 8/17/1988





Dredge - Spoil - These are the soils created by dredging and consist mainly of sand and shells. These soils are droughty because of the texture and shell fragments and have a poor filtering capacity of septic tank effluent, thus posing a threat to surrounding estuarine waters.

Duckston - Fine Sand - This is a poorly drained soil occupying the flats extending inland from the primary dunes. It has a high percentage of coarse sand with a depth to water table that may vary from 2 to 5 feet, to several inches, thus posing potential problems for on-site sewage disposal.

Madeland - These soils are generally found on the sound side of the island and result from dredging for homesites. They are similar to the Dredge - Spoil soils, with poor filtering capacity for septic tank effluent.

Carteret Soils - High - These are the irregularly flooded salt marshes which are covered by tides at least once a month and sometimes weekly. They are significant in the life cycles of many forms of marine habitat and have a low support capacity for structures.

Newhan-Corolla Complex - These two soils are consolidated and cannot be separated in most places. They are the low dunes and intervening basins that separate the dunes. The Newhan soils are mostly on the low dunes, with coarse sands and water tables below 7 feet. The Corolla soils occupy the basins and may have seasonal water tables within 1 to 2 feet of the surface.

### Water Supply

Ground water constitutes the sole source of potable water for both public and private systems in Surf City. Pender County is underlain by a vast aquifer of ground water in the Surf City area.

Pleistocene and recent surficial sands constitute the principal water source for most private wells in Surf City. In the surficial sands, water usually occurs within 15 feet of the land surface, but may be partially confined by clay in the lower part of the aquifer. The productivity of this aquifer is limited primarily by its thickness; it is recharged by rainfall and easily subject to contamination.

The Castle Hayne limestone aquifer is not extensively used for water supply in the beach area, but is potentially valuable as a large, long term supply. The formation begins at 35 feet below mean sea level, where its waters occur under artesian conditions. Recharge to the Castle Hayne aquifer does not occur in the immediate beach area and its waters are therefore not as vulnerable to contamination as those of the surficial sands.

The quality and quantity of water from the Castle Hayne aquifer vary locally. In the Surf City area, it is generally high in iron, low in chlorides, with a pH of 7-8; at Holly Ridge, indications are that a specific capacity of 50-70 gallons per minute per foot drawdown can be

obtained. Most attempts to obtain good water from the Castle Hayne in the immediate beach area have proved unsuccessful thus far. As described on page 11, Water Distribution System, Surf City's two water supply wells are located about one mile north of Town along NC 50/210.

### Fragile Areas

In addition to the Areas of Environmental Concern (AEC's) identified previously as Hazard Areas, there are additional AEC's applicable to the Surf City Land Use Plan: Coastal Wetlands, Estuarine Waters, and Public Trust Areas. The Maritime Forest Areas in Surf City constitute Fragile Coastal Natural Resource Areas and are also part of this section.

Coastal Wetlands. Coastal wetlands are generally composed of estuarine tidal marshes and mud flats that cover all but the high sand ridges, dunelands and maritime forests of Surf City along its sounds, creeks and bays. The soils are poorly drained and are subject to daily and frequent tidal flooding. Tidal marshes are of two types - low tidal and high tidal. Low tidal marshland consists mostly of Spartine alterniflora and is usually subject to inundation by the normal rise and fall of lunar tides. They are particularly significant because of the high yield in organic detritus which serves as a primary food source for various species of fish and shellfish such as menhaden, shrimp, flounder, oysters and crabs. The roots and rhizomes of Spartine alterniflora serve as waterfowl food, and the stems as wildlife nesting material. Low tidal marshes also help to retard shoreline erosion. High tidal marshland is subject to occasional flooding by tides, including wind tides, and is characterized by Juncus roemerianus and various species of Spartina. These marshes have many of the same functions as the low tidal marshes - food supply for the estuarine system, wildlife habitat, sediment trap, and deterrent to shoreline erosion.

Estuarine Waters. Estuarine waters are defined as all the waters of the Atlantic Ocean within the boundary of North Carolina and all waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing and inland fishing waters. They are the dominant component of the entire estuarine system and are the most productive natural environment in North Carolina. They support the commercial and sport fishing industries, since these species must spend all or part of their life cycle within the estuarine system to mature and reproduce. The high productivity of the system results from the circulation patterns caused by tidal energy, fresh water flow and tidal depth. The circulation transports nutrients, propels plankton, spreads seed stages of fish and shellfish, flushes waste from animal and plant life, cleanses the system of pollutants, controls salinity, shifts sediments, and mixes the water to provide a multitude of habitats. Important features are mud and sand flats, eel grass beds, salt marshes, submerged vegetation flats, clam and oyster beds and nursery areas.

Public Trust Areas. Generally, public trust areas within the jurisdiction of the Town of Surf City are all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of the State's jurisdiction; all natural water bodies subject to measureable lunar tides and lands thereunder to the mean high water mark; and all navigable natural bodies of water and lands thereunder to the mean high water level. Their significance is that the public has rights in these areas including navigation and recreation. In addition, they support commercial and sports fisheries, have aesthetic value, and are important resources for economic development.

Maritime Forests. One significant area that is fragile in the sense of its vulnerability to development is the maritime forest that exists primarily on the western side of N.C. 50 towards the southern limits of Town. It is a highly variable complex of upland, intermediate, and wet forest dominated largely by hardwood tree species. It is thought to be the ultimate phase of forest succession common to the barrier islands that takes up to 1,000 years to develop. The shape and structure of the forest are governed by the interaction of salt spray kill and soil growing conditions. In some areas, such as those found at Surf City, stunting from salt spray and poorly developed soils have produced a very low canopy, and species usually characteristic of the sub-canopy have become part of the canopy. Some of the subcanopy species are American Holly, yaupon, hornbeam, and flowering dogwood. The maritime forest is significant for its aesthetic appeal, wind buffering ability, sand trapping capability, and as habitat for many bird and animal species. Town policies governing development in maritime forest areas are presented on page 31.

Cultural Resources. According to the North Carolina Department of Cultural Resources, there are no known archaeological sites or structures of architectural or historic significance located within the Town limits (its planning jurisdiction). There is, however, a high probability of archaeological sites existing along the mainland shoreline as indicated on Map 3 (page 19).

#### Community Facilities Capacity

Specific community facilities within Surf City are identified and their capacities discussed in the Existing Conditions Section of this Land Use Plan Update (page 9).

## POLICY STATEMENTS

### Assessment of 1981 Plan Policies

The 1981 Land Use Plan contained policies under major headings of:

- o Public Participation
- o Natural Resources
- o Development

The purpose of this section is to assess the progress that has been made since adoption of the 1981 plan in implementing these policies. This assessment, in turn, provides a basis for formulation of this plan's expanded policy statement.

#### Public Participation

The primary policy was to ensure "that all resident property owners have equal participation status in land use or other public decisions that may affect them." Since adoption of the 1981 plan the Town has strived to maintain open lines of communication with its citizens. Primary responsibility for citizen participation in land use issues falls upon the Town's Planning Board. This board, consisting of a broad cross-section of area residents, had the primary task of formulating this land use plan for recommendation to the Town Board.

In developing this land use plan, the Planning Board, in conjunction with the Town Board, determined to expand the scope of the 1981 plan's goal to include all "resident property owners" (by including both property owners and residents). To accomplish this, a citizen survey was mailed to all water customers in the Town. The results of this survey are tabulated and appear as Appendix I.

The Town continues its strong commitment to public participation in the planning process.

#### Natural Resources

This section of the 1981 plan contains policies for Constraints to Development, Areas of Environmental Concern, Areas of Local Concern, Recreational Fisheries, and Off-Road Vehicles.

Constraints to Development. This section recognizes the generally poor soil conditions found within Surf City. It was the Town's policy to ensure that all new development comply with State, Federal and local rules concerning the installation of on-site sewage disposal systems. Further, the Town's policy was to encourage new development to locate in areas most suitable for on-site disposal. Surf City adhered to this policy and, moreover, is addressing this issue in a more comprehensive manner by pursuing the installation of a central sewage system.

Areas of Environmental Concern. This section included the estuarine system, ocean hazard areas, and flood hazard areas. Estuarine system policies were essentially to implement State guidelines within these AEC's. The Town continues to support C.A.M.A. regulations

through its minor permitting authority and by way of cooperation with State C.A.M.A. officials.

**Ocean Hazard Area.** These policies indicated the preferred method of erosion control to be beach renourishment projects and similar comprehensive shoreline management programs. Individual small scale methods are discouraged. Additionally, it was policy to promote the creation of new dunes aligning, if possible, with existing adjacent dune ridges. The Town continues to promote the creation of dunes through the placement of Christmas trees, sand fences, etc. to assist in dune creation and enforcement of policies to protect vegetation stabilizing the dunes.

**Ocean Erodible Areas.** Policies were to allow those uses permitted by the Town's zoning ordinance. Additionally, the 1981 Plan's Land Classification Map essentially identified this area as a Conservation Zone and thereby most uses not related to conservation of beach access are restricted.

**Flood Hazard Area.** Policies consisted primarily of implementing Federal Flood Insurance program regulations in conjunction with local zoning regulations. The Town continues to participate in the Federal Flood Insurance program and is now enforcing the Flood Insurance Rate Maps adopted in February of 1985.

#### Areas of Local Concern

**Maritime Forests.** These areas were identified as being of local concern. The Town's policy was to encourage the maintenance of existing maritime forests by allowing only that development that will cause the least practical disruption to maritime forest cover. Uses permitted under the Town's zoning ordinance are allowed but development must be consistent with this policy. Since adoption of the 1981 plan, the Town undertook comprehensive revisions to the zoning ordinance which included provisions to protect the maritime forest area. Principally, the Town encourages the development of maritime forest areas through its planned unit development regulations. This allows the transfer of density on a site to allow a landowner reasonable use of its property while protecting and leaving as much land in its natural state as possible.

**Recreational Fisheries.** The Town's policy was to encourage that all existing and future fishing piers be open to the public at reasonable fees and that such piers be constructed to the Town's construction standards for piers.

#### Development Policies

The Town encouraged single family, commercial and institutional land uses to locate under the terms of its zoning ordinance and in accordance with its natural resource policies. Its stated preference for commercial uses are those intended to provide limited retail and professional services designed to serve tourists and permanent residents.

The timing of development is to be consistent with natural resource policies and also within the capacity of the Town to provide water and other municipal services. Density is to be consistent with the Town's zoning ordinance.

Carrying capacity focused, again, on the use of on-site sewage disposal systems. While continuing to adhere to all local and state regulations governing such systems, the Town continues to work toward implementation of a Town-wide sewage collection and treatment system.

Beach access, preservation and erosion control policies were aimed at protecting the existing dune system by stabilizing vegetation, restricting the flow of pedestrian traffic across dunes, and enforcing the dune protection ordinance. The Town also has continued to actively develop additional beach access areas in conjunction with the State Division of Coastal Management.

There are no known cultural, historical or archaeological resources in Surf City. Nevertheless, the Town's policy was to cooperate with State and Federal agencies in the protection and identification of any potential resources.

Hurricane and evacuation policies consisted of the plan in place in 1981. In 1984, with assistance from the State Coastal Management Program, the Town prepared Storm Hazard Mitigation, Post-Disaster Reconstruction and Hurricane Evacuation Plans and Policies in accordance with State C.A.M.A. guidelines. This plan was done in conjunction with the Town of Topsail Beach. The updated 1984 policies are part of this document and continue to be utilized by the Town.

#### BACKGROUND AND PURPOSE

Land use policies serve several purposes. First, they act as guides for desired future development and land use changes. In this sense, they may be followed directly or used to interpret the more specific standards set out in Town ordinances, such as the zoning ordinance. When used to interpret ordinances, their function is to provide insight into the desired purpose of a particular regulation, so that its spirit is observed as carefully as its letter. However, policies are not intended to take precedence over Town ordinances and do not have the effect of ordinances. A second purpose is to serve as an expression of Town opinion on land uses permitted within Areas of Environmental Concern. They act as an accepted point of compromise between federal and state agencies and the Town. Broad community requirements and needed cooperation from these agencies are expressed in the policies. This purpose is central to the Coastal Area Management Act's mandate of a land use planning process involving a partnership between state and local governments. A third and related use is as a component of state and federal review of permits or grant applications. Development permits must be consistent with local land use plans, as must the expenditure of federal or state funds. These last two purposes pose potential sources of conflict and of opportunity in the land use planning process.

The State Guidelines for Land Use Planning require that five broad

policy groups be formulated where appropriate for the particular locality. These are: Resource Protection, Resource Production and Management, Economic and Community Development, Storm Hazard Mitigation and Post Disaster Recovery, and Continuing Public Participation. Within each of these areas issues are to be defined, alternatives considered and policies and methods of implementation selected. Specific policies are to be stated on certain issues within each of the broad policy areas.

## 1. RESOURCE PROTECTION

- A. Estuarine System. Within the estuarine system are included coastal wetlands, estuarine waters, estuarine shorelines and public trust areas. The overriding issues with regard to establishing land use policies for development within the estuarine system are what uses will interfere least with the interdependent components of the system and will not upset the natural balance and relationship of these components that create public, social and economic values; and, to the extent that uses are permitted, how can these uses be controlled, so that if the natural working system is interfered with, superior public and economic values will be created by the allowed use. Specific policies regarding the individual AEC's comprising the estuarine system are stated below.

### Policies:

- 1) Coastal Wetlands. Activities in the coastal wetland areas shall be restricted to those which do not significantly affect the unique and delicate balance of this resource. Suitable land uses include those giving highest priority to the protection and management of coastal wetlands, so as to safeguard and perpetuate their biological, social, economic, and aesthetic values to establish a coordinated management system capable of conserving and utilizing coastal wetlands as a natural resource essential to the functioning of the entire estuarine system. Highest priority of use shall be allocated to the conservation of existing coastal wetlands. Second priority shall be given to those uses that require water access and cannot function elsewhere.

Acceptable land uses may include utility easements, fishing piers, and docks. Unacceptable uses may include, but would not be limited to, restaurants, businesses, residences, apartments, motels, hotels, parking lots, private roads, and highways.

Estuarine waters. In recognition of the importance of estuarine waters for the fisheries and related industries as well as aesthetics, recreation, and

education, Surf City shall promote the conservation and quality of this resource. Activities in the estuarine water areas shall be restricted to those which do not permanently or significantly affect the function, cleanliness, salinity, and circulation of estuarine waters. Suitable land/water uses include those giving highest priority to the conservation and management of these areas so as to safeguard and perpetuate their biological, social, economic, and aesthetic values and to establish a coordinated management system capable of conserving and utilizing estuarine waters in order to maximize their benefits to man and the estuarine system. Highest priority of use shall be allocated to the conservation of estuarine waters and its vital components. Second priority shall be given to uses that require water access and cannot function elsewhere.

Public Trust Areas. In recognition of certain land and water areas in which the public has certain established rights and which also support valuable commercial and sports fisheries, have aesthetic value, and are resources for economic development. Surf City shall protect these rights and promote the conservation and management of public trust areas. Suitable land/water uses include those which protect public rights for navigation and recreation and those which preserve and manage the public trust areas in order to safeguard and perpetuate their biological, economic, social, and aesthetic value, e.g. dredging, bulkheading, jettying.

Estuarine Shorelines. CAMA defines the estuarine shoreline at Surf City as the areas 75 feet landward of the estuarine waters. Surf City recognizes: (1) the close association between estuarine shorelines and adjacent estuarine waters; (2) the influence shoreline development has on the quality of estuarine life; and (3) the damaging processes of shorefront erosion and flooding to which the estuarine shorelines is subject.

Suitable land uses are those compatible with both the dynamic nature of estuarine shorelines and the values of the estuarine system.

Residential, recreational, and commercial land uses are all appropriate types of use along the estuarine shoreline provided that:

- (a) a substantial chance of pollution occurring from the development does not exist
- (b) natural barriers to erosion are preserved and not substantially weakened or eliminated
- (c) the construction of impervious surfaces and areas



not allowing natural drainage is limited to only that necessary to adequately service the development; see also page 26, D. Storm Water Runoff.

- (d) standards of the North Carolina Sedimentation Pollution Control Act 1973, as amended, are met
- (e) development does not significantly interfere with existing public rights of access to, or use of, navigable waters.

Policy Implementation:

- 1) The Town will implement estuarine system policies through zoning ordinance enforcement and delineation of a conservation zone on the Land Classification Map. Only those uses consistent with the estuarine system policies will be allowed. As stated, uses will be regulated through the Town's Zoning Ordinance and by the Land Classification Map's Conservation Zone.
- 2) The Town will require that all building construction conform to applicable state building codes and acceptable marine construction techniques.

- B. Ocean Hazard Areas. The ocean hazard system consists of two areas: 1) ocean erodible areas; 2) high hazard flood areas; and 3) unvegetated beach areas. The ocean erodible areas are areas in which there exists a substantial possibility of excessive erosion and significant shoreline fluctuation. The high hazard flood areas are those areas subject to high velocity waters in a storm having a one percent chance of being exceeded or equaled in any given year as identified on flood insurance rate maps (V zones), or other approved flood elevation data. These areas are considered hazardous because of their susceptibility to change from the constant forces of waves, winds and water upon the unstable sands that form the shore. During storms, these forces are magnified and can cause significant changes in bordering land forms (dunes and beaches) and to structures located thereon. For this reason, the appropriate location of structures on and near these land forms must be reviewed carefully to avoid their loss or damage. The flexible nature of the land forms, which is hazardous to development located immediately on them, also offers protection to development located behind them. The most essential function of these land forms is their capacity to store sand and dissipate wave and wind energy. Establishing policies for ocean hazard areas is complicated by the fact that many of these areas are in private ownership and, because of their proximity to the beach and ocean, are considered prime building sites. The most critical issue with regard to land use policies is what development controls and building requirements are necessary to

insure that construction in these areas does not endanger the lives or property of ocean hazard area property owners or other property owners who may depend upon the protection of land forms associated with the ocean hazard areas, but will not deprive existing or future property owners of the reasonable use of their property.

Policies:

- 1) To the maximum extent feasible, and consistent with a property owner's rights to reasonable use of his property, use of land in ocean hazard areas shall be located, designed and constructed so as to maximize a structure's protection from wind and water and to minimize damage to the protective land forms of dunes and beaches in accordance with C.A.M.A. regulations.
- 2) Preferred erosion control measures to combat oceanfront erosion shall be beach renourishment projects and comprehensive shoreline management, which shall be preferred over small scale methods.
- 3) Newly created dunes shall be aligned, if possible, with existing adjacent dune ridges and shall be of the same general configuration.
- 4) Adding to dunes shall be accomplished in such a manner that the damage to existing vegetation is minimized. Filled areas shall be immediately replanted or temporarily stabilized until planting can be successfully completed.
- 5) Land uses permitted in the ocean erodible areas shall be those uses permitted by the Town Zoning Ordinance.
- 6) Land uses in flood hazard areas shall be those permitted by the Town Zoning Ordinance, which shall include residential, commercial and institutional; provided, however, that all new construction shall meet requirements of the Surf City Flood Damage Prevention Ordinance.

- C. Cultural, Historical, and Archaeological Resources. While there are no known or identified significant cultural, historical, or archaeological resources within the Town, the Town recognizes that there may be significant resources that may be identified in the future in the course of development. The State Department of Natural Resources assisted in the identification of potential resource as in Surf City. In an effort to recognize these potential resources and provide protection to the extent feasible, the following policy is adopted.

Policy: It shall be the Town's policy to cooperate with state and federal agencies or other individuals and institutions in

the protection and identification of significant existing or unidentified cultural, historical or archaeological resources. The Town will notify the State Department of Cultural Resources of proposed development in the potentially sensitive area on the mainland either side of S.R. 50/210 west of the bridge.

- D. Storm Water Runoff. Uncontrolled development adjacent to coastal waters can pose a serious threat to the estuarine system through the rapid discharge pollutant as washed off of impervious surfaces via storm water. Impervious surfaces include streets, parking lots, and rooftops.

Surf City's existing development policies, as specified in the Town's Zoning Ordinance limit lot coverage to a maximum of from 35 to 50 percent in the residential districts.

Further it is the policy of the Town to promote the use of best available management practices to minimize the threat of pollution from storm water runoff. This will be accomplished through site plan reviews, as required by the Town's development ordinances (zoning and subdivision regulations). Examples of these practices include using pervious or semi-pervious materials, such as turfstone or gravel-run for driveways and walks, retaining natural vegetation along marsh and waterfront areas to retain its natural filtering properties, and allowing storm water to percolate into the ground rather than discharging it directly to coastal waters. Stormwater detention ponds can also reduce the direct discharge of pollutants to coastal waters. The Town will comply with N.C. Division of Environmental Management standards for storm water runoff.

- E. Marina and Floating Home Development. Marina and associated Floating Home Development can impact surrounding land and water areas in many ways. For example, alteration to natural systems can significantly effect resource production. Recognizing this, the State, U.S. Environmental Protection Agency and the U.S. Army Corps of Engineers have placed extensive limitations on the Alteration of Natural Systems in conjunction with marina development. Surf City's jurisdiction as to marina development lies primarily with its zoning authority. The Surf City Zoning Ordinance will allow the Town to consider location of any proposed marina facility in conjunction with the location and scale of operation.

The Town's zoning ordinance limits marinas to th C-1, Central Business District; the only areas currently zoned C-1 adjacent to deep water are around the S.R. 50/210 bridge and one area approximately three miles south of Batts Avenue.

It is the policy of Surf City to consider the appropriateness and desirability of any specific proposal to construct a marina on the basis of impact on neighboring uses including aesthetics, hours of operations; traffic generation including ability of the existing road network to

adequately handle peak traffic loads; environmental impacts including water quality and dredge spoil disposal sites; and consistency of the proposal with other policies of the Land Use Plan. Further, Floating Homes are prohibited as Town ordinances prohibit living aboard any vessel.

- F. Development of Sound and Estuarine Islands. The Town recognizes the significant aesthetic and ecological values of these areas that could be lessened by careless development.

Policy: It shall be the policy of the Town to provide the same degree of protection and priority of use as that afforded the estuarine system areas and to include them in the Conservation Zone in the Town Zoning Ordinance and the Conservation Zone of this Plan's Land Classification Map. The placement of signs in these areas is regulated by the Town's zoning ordinance and the N.C. State Building Code, Vol. I.

- G. Maritime Forests. The major value of the maritime forest is aesthetic, although it is an important component of the barrier island eco-system that provides wildlife habitat and helps to stabilize the soil and sand. The basic issue is how much protection should be provided to these areas. Conservation is the preferred choice and the following policy is adopted as a guideline for this choice.

Policy: It shall be the policy of the Town to encourage the maintenance of the existing maritime forest by allowing only that development that will cause the least practicable disruption to the maritime forest cover. All uses currently permitted under the Town Zoning Ordinance will be allowed in areas with maritime forest, but only if consistent with the above policy. To allow for specific implementation, it shall be the Town's policy that any development over four (4) dwelling units within a designated maritime forest area, shall file a site plan with the Town prior to the issuance of any building permits. Further, the Town's zoning ordinance will be amended to designate all maritime forest areas as a "Conservation-Overlay Zone" and any multi-family development within such zone shall be permitted only as a conditional use.

Implementation: The Town will adopt as a part of its procedures for the administration of its building code requirements that plans submitted to the building inspector show maritime forest areas and construction procedures that will cause the least practicable disruption to these areas. Enforcement shall be through the zoning ordinance.

- H. Constraints to Development - Septic Tank Suitability. Most of the major constraints to development and policies that recognize these constraints fall within other policy sections. However, the constraints imposed by soil conditions are severe enough to merit specific policies. The problem has been created in the past when septic tanks were poorly designed and installed and, most importantly, were located either in areas

with high water tables which brought effluent to the surface during wet periods or in areas with rapid percolation rates which allowed effluent to reach ground waters. In either case, lateral movement, either across the surface of the ground or in the groundwater system, of the inadequately aerated effluent reached surrounding estuarine waters, resulting in pollution and eventual closing of shellfishing areas. This effect was documented in a joint study conducted by the U.S. Environmental Protection Agency, the N.C. Department of Natural Resources and Community Development, and the N.C. Department of Human Resources which focused on the Old Settlers Beach area immediately north of Surf City's town limits. This study, and similar occurrences in other areas on the North Carolina coast led to the enactment of several rules and regulations for the location and installation of septic tanks. Generally, those rules require, for both single family detached dwellings and for multiple family and commercial structures, that septic tank systems be located away from shellfishing waters and in areas with suitable percolation rates and low water tables. The enforcement of these rules is primarily in the N.C. Division of Environmental Management and county health department. In addition, the CAMA AEC requirement impose stricter requirements on portions of systems that may approach shellfishing waters. Sites not meeting these requirements must be modified, or the proposed development must be reduced in scope or abandoned. The Town of Surf City, and all development occurring therein, must conform to these regulations; thus, assuming the regulations and their enforcement are adequate, future development should not result in pollution of either groundwater or surrounding estuarine waters.

The primary issues in Surf City, as in other barrier island towns in North Carolina, is whether future development goals at projected densities will result in groundwater or estuarine pollution despite adherence to applicable on-site sewage disposal regulations. Alternative solutions to this problem logically fall within the purview of the State because of the complexity of the problem and highly technical information needed to determine optimum densities. Further, because pollution of surrounding estuarine waters has more than local significance. The State, with the support and cooperation of local government, should take the lead in addressing this issue. The Town is equally concerned because of possible health hazards and also because of the potential loss in a valuable economic resource. However, at the present time, the state has yet to require or recommend optimum densities on a city-wide scale, but has chosen to follow the current approach of requiring adequate sites under the assumption that adequately designed sites will not collectively result in the pollution to be avoided. Without adequate information to indicate otherwise, the town has no authority to restrict projected densities through zoning or other means as long as property owners are adequately complying with existing regulations.

Policy: 1) It shall be the policy of the Town to insure that all future development adheres to all applicable local and state regulations governing the operation, location, and installation of on-site disposal systems. It shall further be the policy of the Town that any action by the Town that may result in an increase in density above that currently permitted under existing ordinances will consider the effects of such action on water quality; and should such effects be negative, the Town will take whatever action is required to mitigate those effects.

2) To the extent that such action does not substantially interfere with an owner's use of his property, the Town's policy shall be to encourage new development to locate in areas with the best on-site capability.

3) The Town will pursue the construction of a central sewage treatment system in accordance with the January 28, 1986 Bond Referendum.

I. Package Sewage Treatment Plants. Package treatment systems are the preferred interim method of sewage treatment; however, all such systems must connect with the municipal system upon availability. Further, package treatment plants must be in keeping with the Town's policies for The Provision of Services to Development (page 31, E).

J. Water Supply Protection. Surf City derives its water via wells supplied by Castle Hayne limestone aquifer. The wells are located about a mile inland because of poor water quality (e.g. iron, chlorides, etc.) in the immediate beach area. Recharge of this aquifer occurs inland and the Town therefore has no policy jurisdiction as to protect its water supply.

## 2. RESOURCE PRODUCTION AND MANAGEMENT

The Guidelines for local planning require discussion and formulation of policies for a wide range of issues, several of which are not applicable to the Town of Surf City and therefore policy statements are appropriate. These issues include productive agricultural lands, commercial forest lands, and mineral production areas.

A. Off-Road Vehicles. It shall be the policy of the Town to allow vehicles on the beach between September 15th and May 10; (off-tourist season to protect beach users) provided such vehicles are used for commercial fishing purposes only; cross at designated crossover points (to protect the dune system), are manufactured four wheel drive vehicles and have a valid Beach Permit issued by the Town of Surf City.

B. Recreational Fisheries. While the Town has little influence over the quantity of fish caught, it does have a vital interest in assuring that recreational fishermen have access to the ocean, beaches, and sounds. Access policies to the beach are

discussed in following sections (page 32). To assure continued access for fishing to the ocean and sound, the Town adopts the following policy.

Policy: It is the policy of the Town that existing and future commercial piers constructed within the Town will be open to the public at reasonable fees and shall be constructed according to the Town's construction standards for piers and docks set out in Chapter 6 of the Town Code. Further, the Town supports State fishing regulations and the enforcement thereof.

### 3. ECONOMIC AND COMMUNITY DEVELOPMENT

Surf City's development policies are established to provide a general guide to resolving the basic land use issues of type, timing, location and density of growth. As such, they are an extension and expansion of the plan's other policies, a confirmation of existing policies and ordinances, and an expression of public opinion. Timing of development, or when development will occur, is largely dependent upon the availability of facilities. Location is determined by the desired spatial relationship between land uses and is influenced heavily by natural constraints. Density of development is a function of the ratio of population and number of dwelling units per unit of land. The interaction of each of these determinants of land use shapes the pattern and character of the Town and its environs. Formulation of policies for each of these issues requires consideration of broad alternative growth patterns and selection of a general growth objective.

The degree or amount of growth that any community chooses to accept is generally stated in broad terms of no growth, unlimited growth, or controlled growth between the two extremes. These choices represent the Town's overall development alteration. A more specific statement and definition of these choices is generally expressed by the terms and restrictions of land use ordinances, such as zoning ordinances and subdivision regulations.

- A. General Development Objective. It is the objective of the Town to adopt policies and ordinances and take appropriate actions to promote low to moderate density controlled growth and development of the Town as a predominantly residential community with supporting retail services and tourist oriented uses. The term "single family residential" includes multi-family ownership units (for example, condominiums), provided such development is consistent with other Town policies and ordinances.
- B. Types of Development. It shall be the policy of the Town to permit single family, commercial, and institutional land uses within the Town under the terms of the zoning ordinance and in accord with the other policies of this plan. Preferred commercial uses are those necessary to

provide adequate goods and services to visitors and residents while not interfering with surrounding residential development.

- C. Location of Development. The location of development shall be consistent with the Town Zoning Ordinance and the other plan policies. Commercial, multi-family or single family attached developments shall be planned and located so as not to interfere with surrounding residential development.
- D. Timing and Density of Development. The timing of development shall be consistent with the plan's other policies and the capacity of the Town to provide water and sewer services to additional projected development. Water and sewer facilities should not be expanded to a capacity greater than that required to accommodate projected permanent or peak populations; that is, no facility expansions should be provided to induce or promote growth beyond that which is needed. The density of development shall be consistent with the Town Zoning Ordinance.
- E. Provision of Services to Development. Surf City is committed to providing municipal services to all approved development within the Town. This includes water supply, solid waste collection, police protection, and fire and rescue through support of volunteer departments. The Town is also committed to providing public waste water collection and treatment to residents and property owners. To accomplish this, the Town has completed a preliminary engineering and feasibility study for a sewage system. During October, 1985, the Town Council approved a General Obligation Bond referendum for funding the proposed system. The referendum is scheduled to be held during 1986.

Policy: The Town will provide water, solid waste collection, and police services to its residents and property owners. Fire and rescue services will be provided through financial support of volunteer departments.

Policy: It is the Town's policy that waste water collection and treatment be provided only as a municipal service by the Town Government. The Town will continue to make good faith efforts to construct a sewage system. This policy precludes the provision of waste water collection and treatment as a utility system by any entity other than the Town Government of Surf City. It does not preclude the construction of on-site sewage systems designed only to service a specific single development. Further, it shall be inconsistent with this policy to allow any portion of any waste water collection and/or treatment system not owned and operated by the Town to be constructed in Surf City whether or not the stated intent of such system is to serve development outside the Town of Surf City.



- F. Beach Access, Preservation and Erosion Control. The basic issue is which of the alternative methods of beach preservation and erosion control will, consistent with state and local policies, provide the most economical, safe and environmentally acceptable protection. The two basic alternatives are structural measures, such as bulkheads (not allowed on the oceanfront) or groynes and renourishment, and non-structural methods, such as vegetation maintenance and access control. The following policies are adopted for this issue:

Policy: 1) Renourishment, supplemented by land use controls, access control and vegetation maintenance, is the preferred alternative for erosion control.

Policy: 2) Since the dune and berm is a resource used by persons throughout the region and state, the cost of its maintenance should be distributed among the user-beneficiaries in equal proportion to the benefit received.

Policy: 3) The expenditure of public funds for dune and berm protection must be complemented by the provision of public access to the beach and shore.

Policy: 4) To protect the dune system and its stabilizing vegetation by (1) routing the flow of pedestrian traffic to central points of access to the water; and (2) enforcing dune protection ordinances.

Policy: 5) To implement the policies and recommendations of the Surf City Beach Access Plan.

- G. Types and Location of Industry Desired. There are no industrial uses in Surf City. The Surf City Zoning Ordinance does not permit industrial uses.
- H. Redevelopment of Developed Areas. The Town supports redevelopment and upgrading of property in accordance with its zoning and subdivision regulations. Further, the re-subdivision or in-fill of already platted areas is preferred over the development of new areas requiring new roads, utilities, etc.
- I. Assistance to Channel Maintenance and Beach Nourishment Projects. The Town supports such state and federal projects and will assist with providing dredge spoil sites including temporary easements.
- J. Energy Facility Siting and Development. Offshore energy development is not expected to occur during the 10-year planning period and industrial uses are not currently allowed by the Town's zoning ordinance.

## STORM HAZARD MITIGATION AND POST DISASTER PLANNING

### A. Storm Hazard Mitigation

The Surf City Storm Hazard Mitigation Plan dated June, 1984 contains the following policies:

The entire Town of Surf City is susceptible to significant storm damage from a hurricane or a storm of similar magnitude. About 70% of the development in the Town is located in AEC's or in areas susceptible to flooding associated with the 100-year storm. The entire Town is susceptible to wind damage. In general, the Town's existing mitigation policies meet the requirements for Hazard mitigation planning outlined in Before the Storm; McElvea, Brower and Godschalk, 1982. Specifically:

- (1) The Town's policies support and are consistent with State policies and regulations for development in Areas of Environmental Concern.
- (2) All new development must conform with the provisions of the N.C. Building Code.
- (3) The Town's flood plain development policies conform with all Federal and State requirements.
- (4) The Town does an adequate job of controlling mobile home developments in order to minimize hazard damages. While mobile homes are still permitted and will be damaged by a major storm, they are at least restricted to specific districts and must conform with elevation and other requirements.

### B. Post Disaster Reconstruction

The Town's Post Disaster Reconstruction Plan is dated June, 1984 and is organized in the following sections:

- o Introduction
- o Organization of Local Damage Assessment Team
- o Damage Assessment Procedures and Requirements
- o Organization of Recovery Operations
- o Recommended Reconstruction Policies

The following provides a summary of the Plan's most important provisions and policies from each of these five sections:

- (1) Introduction. Defines plan purpose and use; identifies 3 distinct reconstruction periods: Emergency, Restoration, and Replacement/Reconstruction. Outlines sequence of procedures to be followed to meet State and Federal Disaster Relief regulations: 1) Assess storm damage and report to County; 2) County compiles and summarizes individual community reports; 3) State compiles County data and makes recommendation to the

Governor; 4) Governor requests Presidential declaration;  
5) Federal relief programs available.

- (2) Organization of Local Damage Assessment Team. Outlines personnel available; establishes team members; designates building inspector as team chief.
- (3) Damage Assessment Procedures and Requirements. The purpose of this phase is to rapidly determine immediately following a storm disaster: 1) number of structures damaged; 2) magnitude of damage by structure type; 3) estimated total dollar loss; and 4) estimated total dollar loss covered by insurance. To accomplish this, the Plan establishes four categories of damage: 1) destroyed - (repairs over 80% of value); 2) major (repairs over 30% of value); 3) minor (repairs under 30% of value); and 4) habitable (repairs under 15% of value). A color coding system in conjunction with County tax maps is recommended for this phase of damage assessment. Total damage in dollars is estimated by taking the County tax valuations times a factor to make prices current and then factoring these figures according to the above damage classifications. Estimated insurance coverage is made by utilizing information as to average coverage obtained from insurance agencies on an annual basis.
- (4) Organization of Recovery Operations. The Mayor and Council assume the duties of a Recovery Task Force. The Task Force must accomplish the following:
  - o Establish reentry procedures
  - o Establish overall restoration schedule
  - o Set restoration priorities
  - o Determine requirements for outside assistance and request such assistance when beyond local capabilities.
  - o Keep appropriate County and State officials informed using Situation and Damage Reports
  - o Keep the public informed
  - o Assemble and maintain records of actions taken and expenditures and obligations incurred
  - o Proclaim a local "state of emergency" if warranted
  - o Commence cleanup, debris removal and utility restoration activities undertaken by private utility companies
  - o Undertake repair and restoration of essential public

facilities and services in accordance with priorities developed through situation evaluations

- o Assist individual property owners in obtaining information on the various types of assistance that might be available from federal and state agencies

A schedule outlining tasks and general time frames is provided in the plan.

- (5) Recommended Reconstruction Policies. The policies outlined are for the Mayor and Council Members to consider after a storm occurs. It is not practical to determine at this time what specific responses are appropriate. The following policy areas are discussed:

- o Reentry of Surf City Town residents to Topsail Island shall not be permitted until 1) the critical damage assessment has been completed; and 2) the Mayor proclaims the Town safe to reenter.

A list of Surf City (and Topsail Beach and West Onslow Beach property owners shall be maintained at the N.C. 210 and N.C. 50-210 bridge entrances to Topsail Island. Valid identification must be shown in order to proceed on to the Island. Passes shall be issued and displayed at all times until the State of Emergency is officially lifted (this policy is to be coordinated with the Town of Topsail Beach and with Onslow County.)

- o Permitting. Permits to restore previously conforming structures outside AEC's issued automatically. Structures suffering major damage allowed to rebuild to original state but must be in compliance with N.C. Building Code, Zoning and Flood Hazard Regulations. Structures with minor damage allowed to rebuild to original state before the storm. Structures in AEC's and all mobile home concentrations allowed to rebuild only after determination has been made as to adequacy of existing development regulations in these special hazard areas.
- o Utility and Facility Reconstruction. Water system components repaired or replaced must be flood-proofed or elevated above 100-year flood levels.
- o Temporary Development Moratorium. To be considered after major storm damage for AEC's if existing regulations appear inadequate to protect structures from storm damage.

#### C. Hurricane Evacuation

Surf City has adopted a Hurricane Emergency Plan in

conjunction with the Town of Topsail Beach. The Surf City hurricane evacuation procedures are very thorough. The plan presents a program for carrying out evacuation operations as part of a five phase effort: Condition 3 - Hurricane Watch (approximately 48 hours to forecasted landfall); Condition 2 - Hurricane Warning (approximately 24 hours to forecasted landfall); Condition 1 - Evacuation Phase (12 hours or less to expected landfall); Condition 0 - Landfall Imminent; and Reentry. The plan describes how specific preparatory, shutdown, warning and evacuation operation will be conducted by Town personnel during each phase of the evacuation process.

Shore Drive (NC. Highway 50) is the only north-south evacuation route available from the Surf City/Topsail Beach city limits northward to the intersection of Shore Drive and Topsail Drive. Fortunately, Shore Drive is elevated above the 100 year flood elevation over this entire 2.3 mile stretch.

Both Topsail Drive and Shore Drive are available as evacuation routes from their intersection northward to Roland Avenue. Both routes are below the 100-year flood elevation over this stretch. North of Roland Avenue, Topsail Drive, Shore Drive and New River Drive are available for use as evacuation routes. According to the latest FEMA flood insurance rate maps, both New River Drive and Topsail Drive are located below the 100-year flood plain elevation.

Because there is only one evacuation route available for use of Town residents south of the intersection of Shore Drive and Topsail Drive, it is recommended that residents south of this area be evacuated prior to the setting of Condition 1. While the high dunes along this stretch of roadway should protect the roadway from flooding, the concern is that high winds could result in damage that blocks this single evacuation route.

## 5. CONTINUING PUBLIC PARTICIPATION

The most fundamental objective of democratic practice is to insure that public policies correspond closely with the needs and preferences of affected citizens, and to prevent government from overstepping the bounds of its authority. Such an objective must acknowledge and respect the primary purpose of public participation -- increasing the responsiveness and accountability of government to citizens. Because of the great sensitivity to land use regulation, public participation programs should be responsive to the individual property owner as well as special interest groups and the general public.

A public participation program consists of three basic components: (1) education; (2) public participation; a (3) governmental accountability. In preparation, the public must be educated on the basic concepts and process of

decision making, and notified of opportunities to participate. The primary objective of the education component is to improve comprehension and communication between affected citizens and local officials. The second component, public participation, requires two things: first, identification of policy options, and second, estimating support from the public for each alternative. The planners' responsibility is to help structure the public debate by highlighting common viewpoints and weeding out policy options that are not feasible on technical, legal or other grounds. The final component, accountability, requires that the rationale for particular policy decisions be explained and opportunities be provided for testing decisions for fairness and responsiveness.

Surf City actively encouraged citizen participation in the preparation of the 1986 Land Use Plan Update. Planning Board meetings on the subject of the Land Use Plan were announced to the public through press releases to local media and through the posting of notices at Town Hall. Eight meetings were held over the course of the planning process during late 1985 and the first half of 1986.

A citizen's survey was developed and mailed to Town water customers in March, 1986. About 850 surveys were distributed; more than 200 or 25% were returned. Survey results are presented under separate cover by the report: "1986 Land Use Plan Update: Citizen Survey Results". A summary is provided by Appendix I.

The results of the survey were analyzed and discussed by Town officials prior to the development of new Town policies. The survey results provided insight into community values and were used to guide policy development and refinement.

In keeping with the Town's action in the development of the 1986 Plan Update, the following public participation policies will continue to be implemented:

All land use plans and updates will be prepared with public participation. Citizen participation in the land use planning process will be accomplished by using the following plan.

#### I. Citizen Education

- A. Newspaper: News Releases
- B. Working Papers, Draft Plans
- C. Public Meetings

#### II. Citizen Input

- A. Public meetings
- B. Surveys: mailed and returned via

- postal service or delivered door  
to door in condominiums
- C. Review and comments: public review  
meetings

### III. Citizen Support - Ongoing

- A. Ongoing use of I and II above
- B. Formal public hearings

## LAND CLASSIFICATION

### Background and Purpose

The North Carolina Coastal Area Management Act Guidelines require that each city, town and county located in the twenty county coastal areas develop a land classification map classifying all of the land within its jurisdiction into one of five classes and their subclasses.

A land classification system for Surf City has been developed as a means of assisting in the implementation of the goals, objectives, and policies of this Plan. By delineating land classes on a map, the Town and its citizens can specify those areas where certain policies (local, state and federal) will apply. Although specific areas are outlined on the Land Classification Map, it is merely a tool to help implement policies and not a strict regulatory mechanism. The designation of land classes therefore allows the Town to illustrate its policies as to where and to what density growth is desired, and where natural and cultural resources will be preserved.

### Relationship of the Land Classification Map to Policy Statements

The land classification map is a graphic representation of the policy statements formulated and adopted through the citizen participation and plan development process. The classification of land reflects existing development patterns as well as the desired pattern of development as specified in the policy statements. Additionally, development in AEC's must conform to all applicable C.A.M.A. requirements.

### Land Classes and the Land Classification Map

The Land Classes applicable to Surf City are described below. Each of the five broad classes identified by the C.A.M.A. are not used in Surf City. The two applicable broad classes with subcategories are:

#### Developed

- o Developed - Maritime Forest

#### Conservation

- o Conservation - Marshland
- o Conservation - Public Access



The inclusion of a land area into one of these classification categories or subcategories does not dictate the type of land use that will be allowed in a particular location. The classes provide for and are designed to encourage a variety of different land uses. The classifications and subclasses are defined below. Map Four delineates each of the classes and subclasses adopted by Surf City.

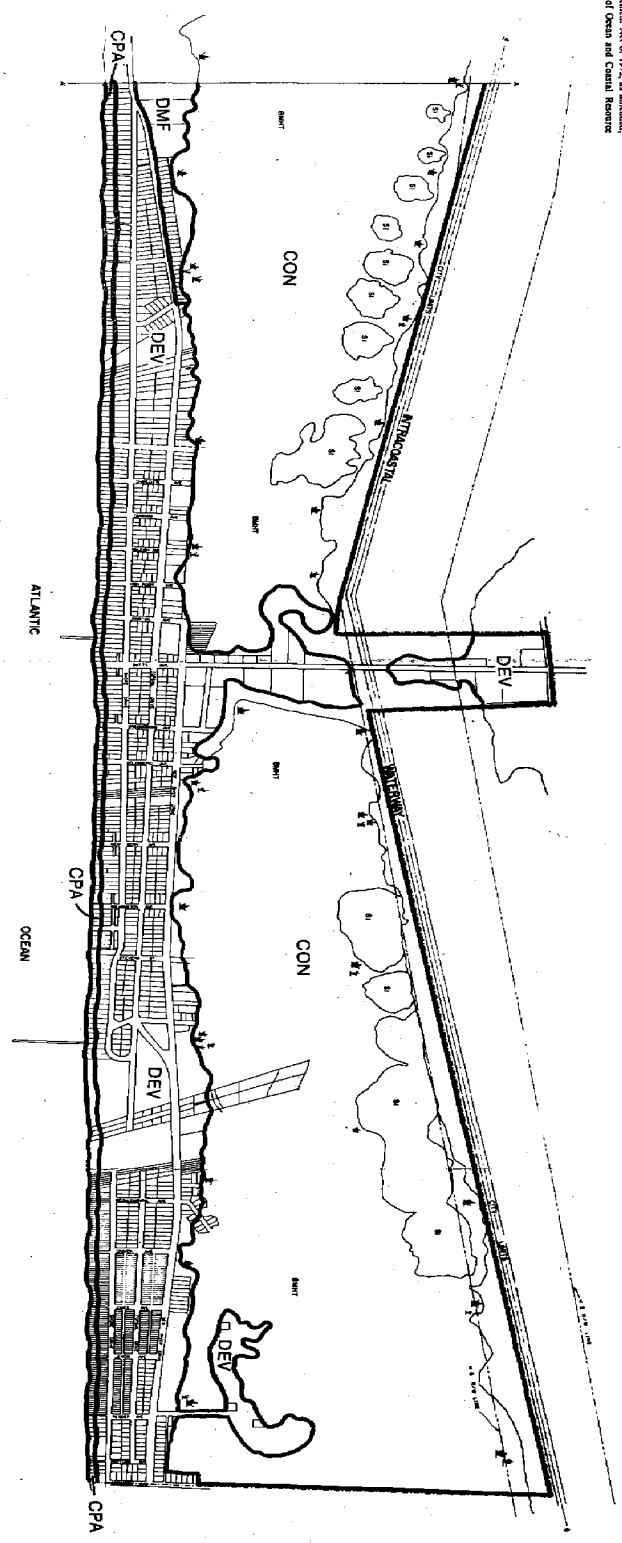
Developed. This class is intended to insure that future development within the Town occurs at rates and densities that are consistent with the Town's capacity to provide necessary sewage disposal facilities and protect surrounding coastal waters.

Developed - Maritime Forests. This subclass is intended to protect the Town's maritime forest areas while providing for reasonable development as allowed by the Town's Zoning Ordinance and other development regulations.

Conservation - Marshland. This subclass includes coastal wetlands, estuarine waters, estuarine shorelines, public trust areas and spoil islands. It is intended to implement estuarine system policies and AEC guidelines.

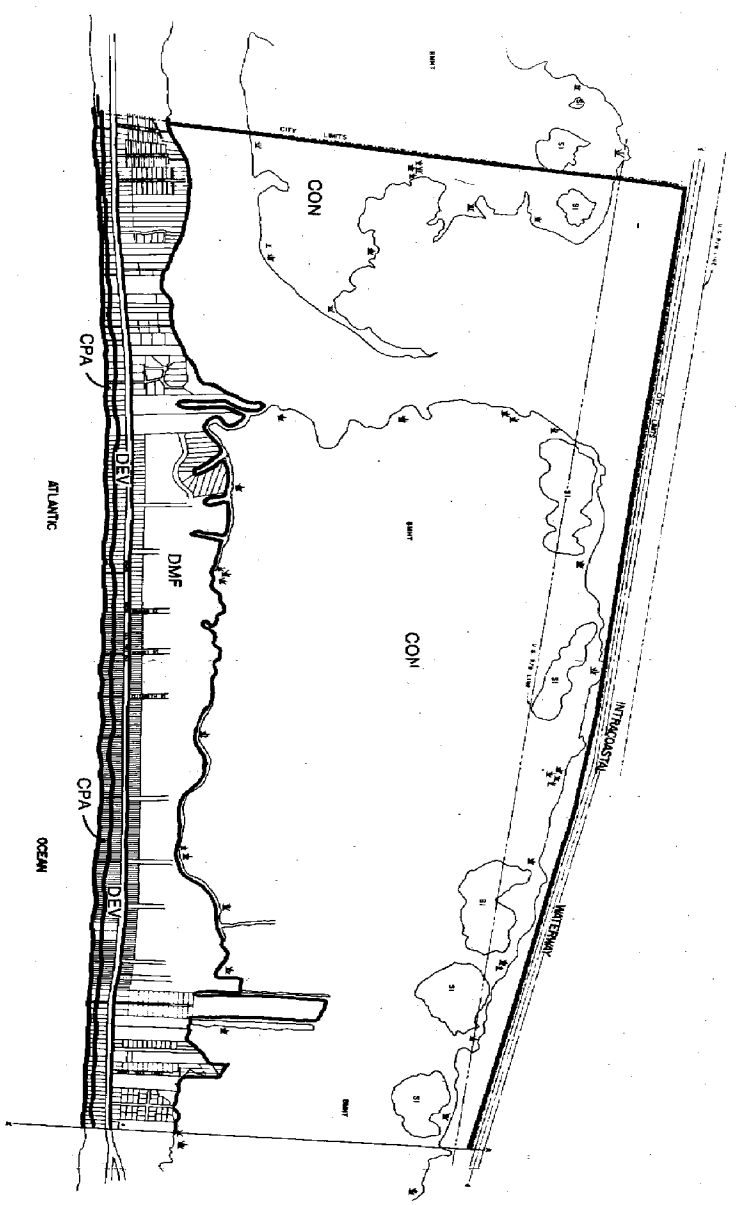
Conservation - Public Access. This subclass is intended to protect the public's right of access to and along the beach while protecting dune areas and related wildlife. It is intended to implement the following policies: Recreational Fisheries, Off Road Vehicles, Beach Access, Preservation and Erosion Control.

The preparation of this map was financed in part through a grant provided by the North Carolina Coastal Management Program, through funds provided by the Coastal Zone Management Act of 1972, as amended, which is administered by the Office of Ocean and Coastal Resource Management, NOAA.



# LAND CLASSIFICATION

- DEV DEVELOPED
- DMF DEVELOPED-MARITIME FOREST
- CON CONSERVATION-MARSHLAND
- CPA CONSERVATION-PUBLIC ACCESS



# SURF CITY, N.C.

MAP 4

Prepared by: SATELLA READING  
St. George, Georgia

Mapping Date: 06/15/1988



0' 500' 1000'

APPENDIX I

CITIZEN SURVEY TABULATIONS

## Citizen Survey Summary

- o 845 Survey forms mailed to water customers/landowners
- o 212 or 25% returned
- o 96% of respondents land owners; 87% live in single family house
- o Development Preferences
  - in undeveloped residential areas  
45% low; 51% moderate; 4% high
- o Extraterritorial jurisdiction; should the Town exercise? 58% yes
- o Types of development denied:
  - more low density residential: 45%  
about the same: 42%
  - more high density residential: 3%  
less 74%; about the same 23%

SURF CITY  
Citizen Survey

CATEGORY: All Responses

TOTAL RESPONSES: 204

1. a. Are you a permanent resident of Surf City? 39/19% Yes 165/81% No
  - b. If No, how many weeks per year do you reside in Surf City?--see Non-resident  

|                                    |   |
|------------------------------------|---|
| Less than 1 week <u>          </u> | Five - Eight weeks <u>          </u>    |
| One week <u>          </u>         | Nine - Fifteen weeks <u>          </u>  |
| Two weeks <u>          </u>        | Sixteen or more weeks <u>          </u> |
| Three weeks <u>          </u>      |   |
| Four weeks <u>          </u>       |   |
  - c. What type dwelling do you live in? Total-195/100%  

|                              |                      |                         |                   |
|------------------------------|----------------------|-------------------------|-------------------|
| Single family <u>169/87%</u> | Duplex <u>21/11%</u> | Mobile Home <u>2/1%</u> | Other <u>3/2%</u> |
|------------------------------|----------------------|-------------------------|-------------------|
  - d. Do you own real estate in Surf City? 191/96%Yes 8/4% No 199/100%
  - e. If yes, is there housing on the property? 190/96%Yes 8/4% No 198/100%
2. In general, what levels of development should the town's growth policy promote for the areas listed below?
  - a. Within undeveloped residential areas inside the Town limits? Totals  

|                   |                         |                  |          |
|-------------------|-------------------------|------------------|----------|
| Low <u>88/45%</u> | Moderate <u>100/51%</u> | High <u>7/4%</u> | 195/100% |
|-------------------|-------------------------|------------------|----------|
  - b. Within commercial areas inside Town limits?  

|                   |                         |                    |          |
|-------------------|-------------------------|--------------------|----------|
| Low <u>46/26%</u> | Moderate <u>104/59%</u> | High <u>26/15%</u> | 176/100% |
|-------------------|-------------------------|--------------------|----------|
  - c. Within vacant - undeveloped areas?  

|                   |                        |                   |          |
|-------------------|------------------------|-------------------|----------|
| Low <u>92/48%</u> | Moderate <u>85/45%</u> | High <u>13/7%</u> | 190/100% |
|-------------------|------------------------|-------------------|----------|
  - d. Should the Town exercise 1 mile extraterritorial jurisdiction?  

|                   |                  |                          |          |
|-------------------|------------------|--------------------------|----------|
| <u>113/58%Yes</u> | <u>41/21% No</u> | <u>42/21% No Opinion</u> | 196/100% |
|-------------------|------------------|--------------------------|----------|

## All Respondents, contin.

## 3. Should the Town have more or less of the following types of development?

|                               | <u>More</u>   | <u>Less</u>    | <u>About the same</u> | <u>Totals</u>   |
|-------------------------------|---------------|----------------|-----------------------|-----------------|
| a. Low density residential    | <u>95/45%</u> | <u>27/13%</u>  | <u>87/42%</u>         | <u>209/100%</u> |
| b. Medium density residential | <u>36/19%</u> | <u>67/35%</u>  | <u>89/46%</u>         | <u>192/100%</u> |
| c. High density residential   | <u>5/3%</u>   | <u>125/74%</u> | <u>39/23%</u>         | <u>169/100%</u> |
| d. Commercial                 | <u>55/34%</u> | <u>47/29%</u>  | <u>62/38%</u>         | <u>164/100%</u> |
| e. Recreation/<br>Open Space  | <u>74/61%</u> | <u>3/2%</u>    | <u>45/37%</u>         | <u>122/100%</u> |
| f. Other                      | <u>51/96%</u> | <u>2/4%</u>    | <u>0/0%</u>           |                 |

## 4. Are you generally satisfied with the level and delivery of services offered by the Town?

171/86% Yes    15/8% No    13/7% Undecided    199/100%

## 5. Would you be willing to pay a special assessment tax for storm water drainage improvements throughout the Town?

33/30% Yes    73/67% No    3/3% Undecided    109/100%

## 6. What type of recreational facilities do you feel are needed in Surf City?

Parks/Picnic area 104

Waterfront access  
improvements (boat  
ramps, parking, ets.) 127

Active recreation facilities  
(tennis, basketball, etc.) 106

Community Center 56

Walking/jogging paths 98

No other facilities 24

## 7. What are the most important planning problems/needs facing Surf City over the next five years?

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SURF CITY  
Citizen Survey

CATEGORY: Permanent Resident

TOTAL RESPONSES: 39

1. a. Are you a permanent resident of Surf City? 39 Yes ---- No
- b. If No, how many weeks per year do you reside in Surf City? N/A
- |                                    |   |
|------------------------------------|---|
| Less than 1 week <u>          </u> | Five - Eight weeks <u>          </u>    |
| One week <u>          </u>         | Nine - Fifteen weeks <u>          </u>  |
| Two weeks <u>          </u>        | Sixteen or more weeks <u>          </u> |
| Three weeks <u>          </u>      |   |
| Four weeks <u>          </u>       |   |
- c. What type dwelling do you live in?
- |                             |                    |                         |   |
|-----------------------------|--------------------|-------------------------|---|
| Single family <u>35/92%</u> | Duplex <u>1/3%</u> | Mobile Home <u>----</u> | Other <u>1-Apt./3%</u><br><u>1-condo/3%</u> |
|-----------------------------|--------------------|-------------------------|---|
- d. Do you own real estate in Surf City? 36/97% Yes 1/3% No
- e. If yes, is there housing on the property? 35/97% Yes 1/3% No
2. In general, what levels of development should the town's growth policy promote for the areas listed below?
- a. Within undeveloped residential areas inside the Town limits?
- |                   |                        |                 |                                 |
|-------------------|------------------------|-----------------|---------------------------------|
| Low <u>10/26%</u> | Moderate <u>28/74%</u> | High <u>0/0</u> | <u>Totals</u><br><u>38/100%</u> |
|-------------------|------------------------|-----------------|---------------------------------|
- b. Within commercial areas inside Town limits?
- |                  |                        |                   |                |
|------------------|------------------------|-------------------|----------------|
| Low <u>6/15%</u> | Moderate <u>26/67%</u> | High <u>7/18%</u> | <u>39/100%</u> |
|------------------|------------------------|-------------------|----------------|
- c. Within vacant - undeveloped areas?
- |                   |                        |                  |                |
|-------------------|------------------------|------------------|----------------|
| Low <u>11/28%</u> | Moderate <u>27/69%</u> | High <u>1/3%</u> | <u>39/100%</u> |
|-------------------|------------------------|------------------|----------------|
- d. Should the Town exercise 1 mile extraterritorial jurisdiction?
- |                   |                  |                         |                |
|-------------------|------------------|-------------------------|----------------|
| <u>18/51%</u> Yes | <u>12/34%</u> No | <u>5/14%</u> No Opinion | <u>35/100%</u> |
|-------------------|------------------|-------------------------|----------------|

3. Should the Town have more or less of the following types of development?

|                               | <u>More</u>   | <u>Less</u>   | <u>About the same</u> | <u>Totals</u>  |
|-------------------------------|---------------|---------------|-----------------------|----------------|
| a. Low density residential    | <u>22/61%</u> | <u>0/0%</u>   | <u>14/39%</u>         | <u>36/100%</u> |
| b. Medium density residential | <u>12/33%</u> | <u>4/11%</u>  | <u>20/56%</u>         | <u>36/100%</u> |
| c. High density residential   | <u>0/0</u>    | <u>28/80%</u> | <u>7/20%</u>          | <u>35/100%</u> |
| d. Commercial                 | <u>21/54%</u> | <u>5/13%</u>  | <u>13/33%</u>         | <u>39/100%</u> |
| e. Recreation/Open Space      | <u>32/82%</u> | <u>1/3%</u>   | <u>6/15%</u>          | <u>39/100%</u> |
| f. Other                      | <u>9/90%</u>  | <u>1/10%</u>  | <u>0/0%</u>           | <u>10/100%</u> |

4. Are you generally satisfied with the level and delivery of services offered by the Town?

36/92% Yes      3/8% No      0/0% Undecided      39/100%

5. Would you be willing to pay a special assessment tax for storm water drainage improvements throughout the Town?

11/32% Yes      20/59% No      3/9% Undecided      34/100%

6. What type of recreational facilities do you feel are needed in Surf City?

Parks/Picnic area 16

Waterfront access improvements (boat ramps, parking, etc.) 19

Active recreation facilities (tennis, basketball, etc.) 18

Community Center 13

Walking/jogging paths 19

No other facilities 0

7. What are the most important planning problems/needs facing Surf City over the next five years?

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SURF CITY  
Citizen Survey

CATEGORY: Non-Resident

TOTAL RESPONSES: 165

1. a. Are you a permanent resident of Surf City? ---- Yes 165 No

b. If No, how many weeks per year do you reside in Surf City?

|                  |               |                       |                 |
|------------------|---------------|-----------------------|-----------------|
| Less than 1 week | <u>4/3%</u>   | Five - Eight weeks    | <u>22/16%</u>   |
| One week         | <u>9/7%</u>   | Nine - Fifteen weeks  | <u>26/19%</u>   |
| Two weeks        | <u>24/18%</u> | Sixteen or more weeks | <u>21/15%</u>   |
| Three weeks      | <u>13/10%</u> |                       |                 |
| Four weeks       | <u>17/13%</u> | Total                 | <u>136/100%</u> |

c. What type dwelling do you live in?

Single family 134/85% Duplex 20/13% Mobile Home 2/1% Other 1/1%

d. Do you own real estate in Surf City? 155/96% Yes 7/4% No

e. If yes, is there housing on the property? 155/96% Yes 7/4% No

2. In general, what levels of development should the town's growth policy promote for the areas listed below?

|   |                   |                  |                          |                    |                 |
|---|-------------------|------------------|--------------------------|--------------------|-----------------|
| a. Within undeveloped residential areas inside the Town limits?   |                   |                  |                          | <u>Totals</u>      |                 |
| Low   | <u>78/50%</u>     | Moderate         | <u>72/46%</u>            | High <u>7/4%</u>   | <u>157/100%</u> |
| b. Within commercial areas inside Town limits?                    |                   |                  |                          |                    |                 |
| Low   | <u>40/29%</u>     | Moderate         | <u>78/57%</u>            | High <u>19/14%</u> | <u>137/100%</u> |
| c. Within vacant - undeveloped areas?                             |                   |                  |                          |                    |                 |
| Low   | <u>81/54%</u>     | Moderate         | <u>58/38%</u>            | High <u>12/8%</u>  | <u>151/100%</u> |
| d. Should the Town exercise 1 mile extraterritorial jurisdiction? |                   |                  |                          |                    |                 |
|   | <u>95/59%</u> Yes | <u>29/18%</u> No | <u>37/23%</u> No Opinion | <u>161/100%</u>    |                 |

## 3. Should the Town have more or less of the following types of development?

|                               | <u>More</u>   | <u>Less</u>   | <u>About the same</u> | <u>Totals</u>   |
|-------------------------------|---------------|---------------|-----------------------|-----------------|
| a. Low density residential    | <u>73/42%</u> | <u>27/16%</u> | <u>73/42%</u>         | <u>173/100%</u> |
| b. Medium density residential | <u>24/15%</u> | <u>63/40%</u> | <u>69/44%</u>         | <u>156/100%</u> |
| c. High density residential   | <u>5/4%</u>   | <u>97/72%</u> | <u>32/24%</u>         | <u>134/100%</u> |
| d. Commercial                 | <u>34/27%</u> | <u>42/34%</u> | <u>49/39%</u>         | <u>125/100%</u> |
| e. Recreation/<br>Open Space  | <u>42/51%</u> | <u>2/2%</u>   | <u>39/47%</u>         | <u>83/100%</u>  |
| f. Other                      | <u>42</u>     | <u>1</u>      | <u>0</u>              |                 |

## 4. Are you generally satisfied with the level and delivery of services offered by the Town?

135/84% Yes    12/8% No    13/8% Undecided    160/100%

## 5. Would you be willing to pay a special assessment tax for storm water drainage improvements throughout the Town?

22/29% Yes    53/71% No    0 Undecided    75/100%

## 6. What type of recreational facilities do you feel are needed in Surf City?

Parks/Picnic area 88

Waterfront access  
improvements (boat  
ramps, parking, etc.) 108

Active recreation facilities  
(tennis, basketball, etc.) 88

Community Center 43

Walking/jogging paths 79

No other facilities 24

## 7. What are the most important planning problems/needs facing Surf City over the next five years?

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## DATE DUE

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